

Saudi Arabia 2022|2023



Discovering Business

in partnership with



SAUDI BRITISH
JOINT BUSINESS COUNCIL



اتحاد الغرف السعودية
Federation of Saudi Chambers



Copyright © Allurentis Limited 2022. All rights reserved.

Allurentis is delighted to have been involved in partnership with the Saudi British Joint Business Council and the Federation of Saudi Chambers on this, the sixth edition of Saudi Arabia - Discovering Business. We would like to thank all our sponsoring organisations for sharing their valued experience, highlighting the extraordinary opportunities available to international business in the Kingdom.

VISION 2030 – A VIBRANT SOCIETY – A THRIVING ECONOMY – AN AMBITIOUS NATION

Electronic copies of this publication may be downloaded from Allurentis Limited's website at www.allurentis.com, provided that the use of any copy so downloaded, complies with the terms and conditions specified on the website.

Except as expressly stated above, no part of this publication may be copied, reproduced, stored or transmitted in any form or by any means without the prior permission in writing from Allurentis Limited.

To enquire about obtaining permission for uses other than those permitted above, please contact Allurentis by sending an email to info@allurentis.com

Photos courtesy of: www.istockphoto.com | www.shutterstock.com | www.123rf.com | www.stock.adobe.com

Contents

| | |
|---|-----------|
| HRH Prince Khalid bin Bander bin Sultan – Kingdom of Saudi Arabia's Ambassador to the UK | 4 |
| HMA Mr Neil Crompton – British Ambassador to the Kingdom of Saudi Arabia | 5 |
| The changing face of Saudi Arabia – Clyde & Co | 7 |
| New Companies Law means major change and uplift in the corporate sector – Al-Ohaly & Partners, in association with DWF | 11 |
| A new era of banking – Banque Saudi Fransi | 15 |
| Financial & Business Services: Enabling ambition | 17 |
| Navigating the cultural and legal challenges of doing business in Saudi Arabia – Castletown Law | 20 |
| Doing business in the Kingdom of Saudi Arabia – Equiom, Saudi Arabia | 24 |
| Professional Corporate Services in Saudi Arabia – Sovereign PRO Partner Group (PPG) | 29 |
| Saudi British Joint Business Council | 31 |
| Are you looking to expand your business to Saudi Arabia – Servcorp | 32 |
| Technology & Digital: Tech driving a digital future | 34 |
| Entertainment, Sports & Leisure: Showcase of opportunities | 37 |
| Building designs with a sustainable future – Populous | 41 |
| Tourism & Culture: Welcoming the world | 44 |
| Healthcare: Fit for investment | 46 |
| Pharmaceuticals & Bioscience: Growing in health and strength | 48 |
| Transforming Saudi lives through skills development –The Lincoln College Group | 51 |
| Education: Skills for the future | 53 |
| The business that's bringing happiness with every bite – pladis Food Manufacturing Company | 57 |
| The leader in cold chain food logistics in KSA – Asco Logistics | 59 |
| Transport & Logistics: At the heart of global trade routes | 62 |
| Making sustainable transformation a reality in Saudi Arabia – Worley | 65 |
| Renewable Energy: Committed to change | 69 |
| Power: Opening new markets | 71 |
| Oil & Gas: A rich legacy that's driving a bright future | 73 |
| Water: Creativity begins to flow | 76 |
| Rail: A faster future | 78 |
| Aviation: Saudi ambitions take flight | 80 |
| Defence & Security: Keeping Saudi safe | 82 |
| Northern Ireland firms continue to achieve great success in Saudi Arabia – Invest Northern Ireland | 85 |
| UK | |
| Industry & Infrastructure: Towards a smart future | 87 |
| Innovation & Technology: A new kind of industry | 89 |
| Energy: Powering ahead | 91 |
| Healthcare: A beacon for healthcare and life sciences | 93 |
| Education & Skills: Building skills for the future | 96 |

HRH Prince Khalid bin Bander bin Sultan

Kingdom of Saudi Arabia's Ambassador to the UK



HRH Prince Khalid bin
Bander bin Sultan

As the world continues to deal with the economic effects of the Covid-19 pandemic and geo-political instability, 2022 has marked a year of rebound and growth for the Kingdom of Saudi Arabia. Saudi Arabia's Vision 2030 and its implementation programs are driving significant change in the legislation and regulations that govern business, trade, and investment in the Kingdom. A combination of heightened transparency, more clearly defined rights and responsibilities, and a more robust legislative framework has opened up new opportunities for foreign and domestic investors at a time where stability and growth are scarce.

After a robust recovery from the economic fallout of the Covid-19 pandemic in 2021, the Kingdom's economy entered 2022 on an accelerated growth path, with an estimated 9.6% real GDP growth in constant prices in Q1, the highest rate since 2011. This was supported by increases in oil and non-oil activities, as oil production strengthened and receded pandemic pressures reignited domestic demand.

This stability and growth trajectory has not gone unnoticed. Investor interest in Saudi Arabia hit a historic high in Q1 2022, yielding a record-breaking number of new licenses. Marking the seventh consecutive quarterly rise, the first quarter of 2022 witnessed 9,383

new foreign investment licenses. This impressive rise was supported by the government's efforts to improve the investment environment, strengthening investor sentiment as global economies rebound from the effects of the last few years. We also witnessed an increase in the number of companies choosing to establish their regional headquarters in Riyadh, a good sign for our ambitions to turn the city into a regional and international business hub.

With the UK being an essential partner on our Vision 2030 journey, it is only right that we unlock the industries of the future together. That is why 2022 has witnessed landmark green investments such as Alfanar's £1 billion investment in a sustainable aviation fuel project in Teesside. The project will produce around 180 million litres (47.6 million gallons) of sustainable aviation fuel from household and commercial waste.

This marks the tip of the iceberg in terms of our work with the UK as we continue to explore cooperation on trade and financial services, particularly in the fields of FinTech, Open Banking and Green Finance. Given what we have been able to accomplish together in a short period of time, I'm very proud to say that the strategic partnership between our two nations has never been stronger. ■

HMA Mr Neil Crompton

British Ambassador to the Kingdom of Saudi Arabia



HMA Mr Neil Crompton

Saudi Arabia is a huge expanding market and Vision 2030 presents exciting opportunities for UK businesses.

Saudi Arabia and the UK have a long historical relationship. But our relationship is flourishing and modernised in ways that reflect changes in both countries. Our current partnership is anchored in a Strategic Partnership Council that was established in 2018 to reinforce relations between our two countries. This agreement committed us to a deeper and more strategic partnership to enhance mutual interests with Trade and Investment a key feature of this modern partnership.

During my time in Saudi Arabia, I have witnessed first-hand the incredible pace of change which is making Saudi Arabia more attractive for foreign investors. Saudi Arabia jumped 30 places in the last World Bank's Ease of Doing Business Index 2020, making it the world's top improver. Regulatory and institutional reforms underway promise to continue this trend.

Economic diversification continues a pace with new sectors being created and others growing rapidly. The UK is well placed to support this transition. The introduction of a 'super licence' by the Royal Commission of Riyadh City has enabled five British schools to set up in Saudi over the last few months. In healthcare, Kings College Hospital London has broken ground on a new project and will be the first NHS-branded hospital to open in Saudi. UK companies are supporting Saudi's drive to develop its entertainment industry and have been

involved in initiatives supporting the 'season's festivals' with projects such as Winter Wonderland and the Crystal Maze Experience. There are huge opportunities for UK companies across a wide range of other sectors, including in technology, sustainable energy, critical minerals and infrastructure.

Saudi has just overtaken the UAE to be our largest export market in the Middle East with £8.7 billion (+5.5%) in the year to December 2021. Saudi is a G20 economy with more than half the Gulf's population, and the economy is forecast to grow by around 7.5% this year. The UK started negotiations on a Free Trade Agreement with the GCC in June 2022. Once finalised, this will bring down tariffs and help to support more frictionless trade between the UK and the GCC bloc. Visa regimes for both UK and Saudi citizens have been streamlined, facilitating smoother travel between our two countries.

The Department for International Trade (DIT) in Saudi Arabia has wide ranging sectoral expertise, and can provide advice on how to find a local partner and other bespoke assistance in supporting UK companies' trade in the Kingdom. For more information please visit www.great.gov.uk.

I am excited about the future of UK-Saudi trade and believe it represents one of the most promising markets for UK companies overseas. I wish you every success in exporting into Saudi and invite you to contact our DIT team to assist you on that journey. ■

The changing face of Saudi Arabia

Ben Cowling, Partner, Clyde & Co



Ben Cowling

Ben Cowling, Partner at Clyde & Co, provides his insight into the evolution of the Kingdom of Saudi Arabia over the last decade and his predictions for the Saudi Arabia of the future.

When I arrived in Riyadh in 2012, the Kingdom of Saudi Arabia was already the largest economy in the Middle East and a G20 nation. This economy was driven by the Kingdom's role, since the mid-20th century, as one of the world's key producers and exporters of oil, a vital part of the global energy supply. That said, in the ten years since, the country has changed immeasurably, both economically and socially.

Six years ago, His Royal Highness Crown Prince Mohammed bin Salman bin Abdulaziz Al Saud announced a new plan for the Kingdom's future, Vision 2030. HRH's vision is to create a truly international hub of technology and business at the forefront of global trade, driving macro changes and trends, such as climate change initiatives and new industries. To that end, the Government announced SAR 12 trillion (more than US\$3 trillion) to be injected into the Kingdom's economy through government investment activity by 2030.

Vision 2030 has three main pillars: a vibrant society, a thriving economy, and an ambitious nation.

To facilitate Vision 2030 and drive it into action, numerous programmes have been established to support the Kingdom to achieve its goals through investment in the private sector and FDI (focusing largely on legal and regulatory reforms), increasing the ease of doing business, and liberalisation of parts of the economy.

More than 60% of assessment requirements relating to investment, licensing and listing have been removed. These changes have fostered and encouraged private sector and FDI and in turn support the Kingdom's economy in transformation and diversification.

This has resulted in fast paced changes to the regulatory and legal landscape in Saudi Arabia as the country moves towards codified law. The Kingdom's constitutional document, the Basic Law of Governance, prescribes that the Kingdom is an Arab Islamic country, and that Islamic Law (Sharia) is the rule of law. That said, the Basic Law states that laws made by the King

shall also be enforced by the courts and there has been an increasing trend toward updating and modernising legislation to aid the fulfilment of the Vision 2030 objectives.

Regulatory and legislative reforms implemented over the last few years have included the Kingdom's first comprehensive national Data Protection Law to regulate the collection and processing of personal information, an Anti-Concealment Law to regulate trade licensing requirements in conjunction with the Foreign Investment Law, and Bankruptcy Law to deal with orderly and efficient winding down of companies. There have also been updated Commercial Court and Evidence Laws and a draft Commercial Transactions Law. In addition to the regulatory reform, the Kingdom has seen modernisation in how the Laws are governed and enforced. Examples include the digitisation of employment contracts, virtual court hearings and online government services.

The Ministry of Investment of Saudi Arabia (MISA) reported that 3,386 licenses for new foreign investment were issued during H2 2021, representing a 347.9% annual increase compared to H2 2020. Wholesale and retail sectors dominated foreign investment licenses followed by manufacturing, construction, accommodation, food, professional and scientific sectors. We have advised over 2,000 companies, across sectors, setting up or expanding business in Saudi Arabia in the last three years.

Finally, an area close to my heart – as part of Vision 2030, the Kingdom of Saudi Arabia has embarked on an unprecedented national infrastructure and development programme. By way of example, it is



amazing to think that when I first arrived in Riyadh, there was no mass-public transport system in the capital but now the Riyadh Metro is the largest metropolitan train system in the world.

Infrastructure development broadly falls into two categories in the Kingdom: which is procured by the Government directly and which is driven (directly or indirectly) by the Public Investment Fund (PIF). In relation to the former, as part of the legal reforms described above, a new Government Tenders & Procurement Law was enacted in 2019. This implemented centralised tender processes to promote greater transparency, predictability, and efficiency in tendering, and



Many countries have aspirational economic plans, however Saudi Arabia is in the fortunate position of having both the capital and the motivation to deliver. This presents a unique opportunity for the international business community to contribute to the delivery of the plan and to benefit from doing so commercially.

Ben Cowling, Partner, Clyde & Co



a broader (and more balanced) range of contract templates for use on government projects.

As for the PIF, much has been written about the Kingdom's "giga" projects, including NEOM, Red Sea, Amaala and Qiddiya. Each of these projects have different objectives but they all have in common that, while they are funded by the PIF, each of the development companies has been established to operate in a similar manner to the private sector and to deal with the international business community on this basis. As well as supporting the upskilling of Saudi nationals, such companies have recruited many expatriate executives with private sector backgrounds and seek to embrace international best practice in order to maximise infrastructure outcomes.

An example of the level of ambition is the Kingdom's attempt to reinvent the concept of cities as eco-friendly metropolises. The Line, a proposed city in NEOM, will be a city without roads, without reliance on fossil fuels. Working closely with the Government and foreign businesses to develop the strategy for this entirely new urban concept, we are witnessing first-hand the Kingdom's commitment

to creating an entirely new way of not just doing business, but of building societies.

If I had to summarise the effect of Vision 2030, I would say it has unleashed the creative potential of the Saudi youth and helped them to believe that anything is possible. I expect that we will all be impacted by this collective reset of entrenched thinking around infrastructure and other pillars of modern life in the coming years.

Businesses are taking note of the extensive and exciting opportunities Saudi Arabia offers companies keen to be at the forefront of new energy solutions, new technology and vast societal shifts. By embracing the Kingdom's transformation, we are all able to be part of a change that will not only shape Saudi Arabia and the Middle East but may very well drive seismic change in how and where we live and do business on a global scale.

Contact: Ben Cowling, Partner, Clyde & Co

Tel: +966 11 253 2111

Email: ben.cowling@clydeco.com ■

New Companies Law means major change and uplift in the corporate sector

Abdulrahman Al-Ohaly, Managing Partner, Al-Ohaly & Partners, in association with DWF



Abdulrahman Al-Ohaly

A significant change to the corporate governance regime in Saudi Arabia comes into effect at the end of 2022, which should bring the Kingdom in line with other jurisdictions and make doing business here easier, explains Abdulrahman Al-Ohaly, Managing Partner of Riyadh based Al-Ohaly & Partners, in association with DWF.

On 29/11/1443H (28 June 2022), the Council of Ministers approved a new Companies Law. The previous Companies Law promulgated by Royal Decree No. M/3 dated 28/01/1437H has been the corporate handbook for the past eight years, during which the long due Implementing Regulations were never published, but having said that; the previous law had no reference to implementing regulations and was only expected to be a clarification tool.

The Ministry of Commerce however made available certain lists of principles that would help clarify certain areas pertaining to non-listed joint-stock companies, whereas other areas of the previous law were appended

by guidance from the relevant officials at the Ministry of Commerce, which then resulted in setting out certain practices absorbed by the corporate market.

The new Companies Law introduced new legal entities' types, such as the Simplified Joint-Stock Company (SJSC) which is a common entity type in France - Société par actions simplifiée. The SJSC seems to form a combination of both a Limited Liability and the standard well-known joint-stock companies whereby it offers its shareholders the structure and flexibility of the standard joint-stock company, yet does not apply the same compliance reporting to a certain extent such as minimum number of management composition.

This will likely be the preferred model for joint-ventures as it offers the flexibility of the ingress and egress of shareholders as opposed to a limited liability, which grants pre-emption rights and sets out certain procedures carried out and approved by 75% of its shareholders to allow such ingress or egress. Nevertheless, the shareholders are permitted to set out

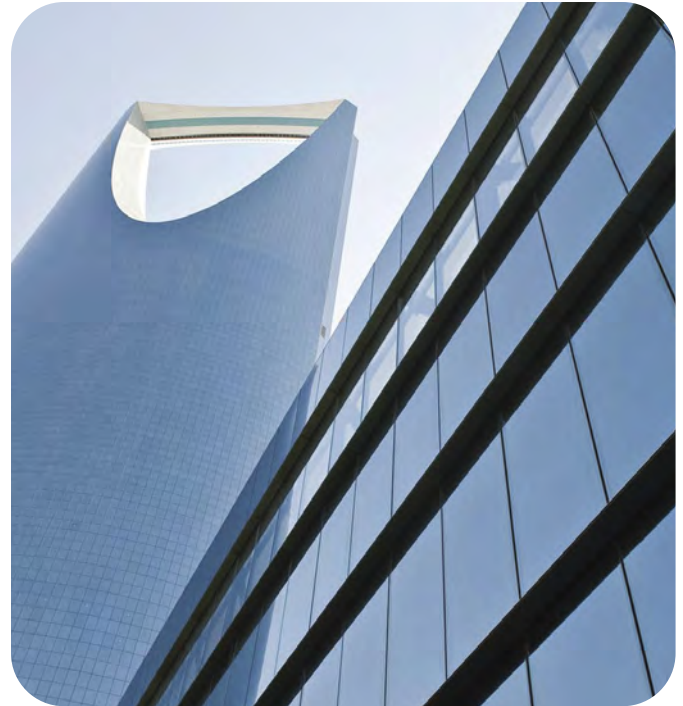
restriction on a shareholder or more by applying selling restriction terms. Also, the SJSC is permitted to issue different classes of shares with different rights and obligations.

In addition, and which fortunately marks a great achievement in corporate transactions governed by Saudi laws, is the recognition of shareholders' agreements (and joint-venture agreements). Prior to the new Companies Law, the only recognised agreement was the company's Articles of Association (or Bylaws) which effectively had a massive impact from an enforceability position.

The regulator's approach in accepting recognition of shareholders' agreements (and joint-venture agreements) and permissibility of including such terms into the company's Articles of Association and Bylaws will be valuable, especially with certain common terms such as Drag-Along and Tag-Along rights, which used to be a gap and difficult to enforce whereby now is resolved by the new Companies Law, and as a result offers founders and shareholders considerable confidence in agreeing such terms at more comfort.

From a dispute resolution angle, the new Companies Law has permitted shareholders to agree on Arbitration as a method of resolving disputes and is no longer limited to competent courts in the Kingdom. Such addition adds value to the contentious side and will also have a positive impact in involving the Saudi Center for Commercial Arbitration (SCCA) to an extent.

The new Companies Law was published in the Official Gazette on the 4 July 2022 and will come into force on 31 December 2022.



What is the significance of permitting the Simplified Closed Joint-Stock Company (SCJSC)?

This will basically introduce a new simplified type of entity that was extremely successful in France in the early 1990s and offered a balanced approach for shareholders whom are not in a position to invest a lot of capital in overhead costs and compliance, yet maintaining a sophisticated entity structure that is well perceived by founding entrepreneurs and possibly being more attractive for potential buyers, given the minimum infrastructure compliance and regulator supervision.

Do you believe that this new legal structure will help attract new foreign investment into KSA?

This will certainly have an impact on the appetite of new foreign investors, especially those entering into joint-ventures with local



The new Law has set out certain methods and measures to assess and evaluate directors and board members' decisions in a company.



investors, or foreign investors with a group policy structure that needs to be followed or adopted in attractive jurisdictions such as Saudi Arabia.

Will this new Companies Law mean companies operating in KSA no longer need to establish holding vehicles in common law-based jurisdictions such as Abu Dhabi and Dubai?

While the new Companies Law offers more flexibility with regards to adopting certain commercial terms that are now permitted and can be recognised by the regulator, the new initiative of setting up foreign Regional Headquarters in Saudi Arabia will also have a greater influence in attracting multinational groups setting up their regional offices in the Kingdom for the purpose of supporting, managing and providing strategic decisions in a manner to direct its vehicles being its subsidiaries, affiliates and branches in Saudi Arabia, and generally within the region.

How will the new SJSC structure help develop the venture capital market in KSA?

The Ministry of Commerce has spent a significant amount of time and effort in considering and discussing the market's pain points and concerns. This included multiple workshops held by the Ministry of

Commerce with investors, venture capitalists whom in turn expressed their opinion in certain areas, that required intervention by the competent regulators which would allow such sophisticated global practice to ascend and mount in Saudi Arabia to a level that is commonly respected in similar well versed and cultured jurisdictions.

Will the new Companies Law help companies raise debt finance?

A provision has been introduced in the New Companies Law by which Limited Liability Companies can (in accordance with the Capital Market laws) issue negotiable debts or financial instruments, such as Sukuk.

How does the new Law affect the fiduciary duties of a company's management or directors?

The new Law has set out certain methods and measures to assess and evaluate directors and board members' decisions in a company. This is a new addition and will certainly give comfort to the directors/board members being aware of how their decision taking rationale will be measured, and also to the shareholders on being confident of their management representatives taking the precautionary measures when passing a certain decision. ■

A new era of banking

Michael Cunningham, Chief Strategy & Digital Officer, Banque Saudi Fransi



Michael Cunningham

Could you describe Banque Saudi Fransi (BSF) and its core lines of business?

BSF is the oldest operating bank in Saudi Arabia and a universal bank offering banking services across retail, wholesale, private (wealth management), and treasury. It is a mid-sized bank with SAR 230 billion in assets and a market cap of SAR 62 billion, placing it within the top five banks in the Saudi market. Historically, it has been geared towards wholesale banking and has maintained a leading market position in that segment. However, it has invested heavily in diversifying its sources of income and bolstering its retail banking abilities to become a customer experience leader.

How important is Vision 2030 to the growth of BSF?

Vision 2030 is the cornerstone project for Saudi Arabia's socio-economic transformation. It aims to diversify the economy and reduce reliance on oil. Therefore, for BSF, Vision 2030 is expected to be a positive driver for growth across all client segments due to the investment in several emerging sectors. We see significant opportunity to serve wholesale clients in those targeted sectors such as new technologies, infrastructure, and mega-projects. In addition, the emphasis on increasing financial literacy and the share of the population that is banked will help spur additional growth in the retail banking segment.

Why is KSA attractive to international FinTech businesses?

KSA is the largest economy in the Middle East region and one of the top 20 global economies. This positions

it as a leading country for business across most sectors. For FinTech, Saudi Arabia has several factors which make it an optimal operating environment. First, KSA has a young, tech-savvy population, with over 95% internet penetration and over 50% below the age of 30. This gives FinTech a great market opportunity in terms of infrastructure and users. Additionally, increasing digital banking penetration is a core target within the Financial Sector Development Program (FSDP) under Vision 2030 and latest figures indicate significant growth in enabling infrastructure, such as a 40% increase in Point of Sale (PoS) terminals and 80% of all transactions being conducted through digital PoS.

What is BSF doing to support international FinTech businesses in KSA?

Over the past three years, BSF has worked on developing several initiatives to engage with FinTech effectively. BSF aims to be the 'Go-To Bank for digital' for global and local FinTech companies and non-banks to capture the untapped and steadily growing potential of the market by providing Banking-as-a-Service (BaaS) to them.

BaaS provides the bank's licensed technology, products, services, and infrastructure through Application Programming Interface (API) to companies willing to run their business in KSA. BSF is developing a wide range of APIs for companies desiring to enter the Saudi market with digital product propositions. BSF as a service also provides reliable and accountable back-end banking infrastructure and helps significantly reduce companies' costs of running a business.

How important is KSA as a global FinTech hub?

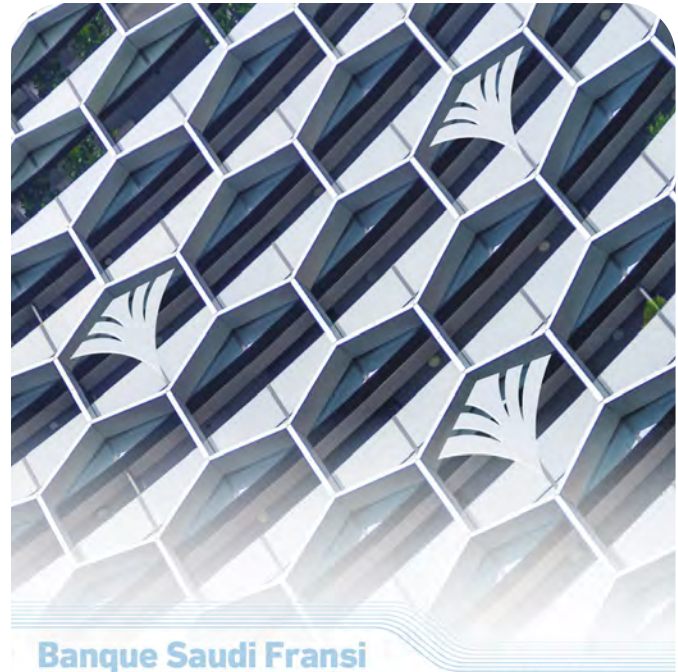
KSA is currently aiming to be at the forefront of innovation and technology development; therefore, it is investing heavily in R&D as well as modernising the required infrastructure to support digital technology, and FinTech is a core pillar of that. Over the past years, several Saudi home-grown FinTechs have achieved or neared unicorn status, and access to talent and funding has been a key driver for interest in this field.

Additionally, the local FinTech ecosystem has the advantage of learning from previous experiences in international markets and building enhanced propositions powered by the most state-of-the-art technology and infrastructure. Combine this with a young, digitally savvy population, supportive regulatory framework, access to funding, and a nationwide transformation, and you will have a unique mixture of success factors to drive innovation in FinTech, not only regionally, but also globally.

Could you explain the workings and significance of the Regulatory Sandbox?

SAMA has introduced the Regulatory Sandbox, which allows FinTechs to operate in the market with reduced restrictions to test their operations and business models and allows SAMA to monitor and work on developing the necessary regulations, enabling these FinTechs to operate as fully regulated entities.

So far, about 40 FinTechs have entered the sandbox since it began in mid-2020. This enables the regulator and FinTechs to adopt a test and learn approach to entering the market, allowing them to optimise their operating and business model while engaging in close conversations with SAMA to develop tailored regulations. This enables optimal operations for these FinTechs and protects their customers and the banking sector.



Banque Saudi Fransi

Modern, Innovative & experience-focused banking

What role are British companies playing in the Saudi FinTech scene?

The British FinTech market is one of the most advanced in the world. In addition, over the past year, several British companies have demonstrated their interest in entering the Saudi market and working with the regulator and local players to establish operations in the country. In 2021, Checkout.com, a UK-based FinTech, invested US\$110 million in a Saudi buy-now-pay-later (BNPL) provider, Tamara, making it a majority shareholder in one of the leading BNPL platforms of the region. Moreover, several initiatives have been launched between the UK and Saudi Arabia to enhance collaboration in the FinTech space, such as the UK Fintech Week and the Mayor's International Business Programme, connecting London-based FinTechs to key Saudi banks and ecosystem players. ■

Financial & Business Services: Enabling ambition

The development of the financial services sector is seen as crucial to achieving Saudi Arabia's Vision 2030 objectives. It is recognised as the foundation of the expansion of the economy, attracting foreign capital, stimulating savings and investments, offering differing sources of funding and diversifying the country's income streams.

The Government is active in supporting financial institutions as part of its plans to develop an advanced capital market, boost public and private sector growth and improve funding for micro, small and medium enterprises (MSMEs). The road map for this is laid out in the Financial Sector Development Program (FSDP), which covers several sub-sectors, including banking, insurance, investment, and stock and debt markets.

Launched in 2017, the FSDP is seen as being highly successful and has achieved some notable goals in the first five years: the Saudi Stock Exchange, Tadawul, became a globally recognised financial index; a derivatives market has been successfully launched; and the

Saudi Central Bank (known as SAMA, the Saudi Arabian Monetary Authority) is continuing to grant new licenses to support the growth of the burgeoning FinTech sector¹. The Government also wants the country to become a cashless society, so SAMA's introduction of the SARIE instant payment system in early 2021 was a significant milestone, contributing to the increase in non-cash transactions. These grew to 57% of all transactions by the end of the year, exceeding the target of 55%².

The second stage of the FSDP, ending in 2025, is already underway and the programme will continue to strengthen financial institutions to support the private sector, by boosting the financial planning options and increasing the share of SME financing provided by banks. The programme, which adheres to the standards of the Bank for International Settlements and the International Organization of Securities Commissions, also aims to develop a sustainable insurance sector and increase the share of non-cash transactions to 70% of all transactions by 2025.

The FSDP's targets for 2025 include: 30 emerging companies to be created; the insurance sector to increase its contribution to GDP by 2.4% by increasing gross written premiums; banks to increase lending to SMEs by 11%; and to increase the market value of the stock market – excluding Aramco – by 80.8%.

Naturally, these aims tend to be complementary. The growth in financial technology, for instance, would encourage both digital banking and non-cash transactions. All these developments are supported by the country's rapidly evolving digital payments infrastructure, which is overseen by Saudi Payments, a wholly owned subsidiary of SAMA, charged with ensuring that both banks and companies provide a secure payment system. SWIFT's global payment system has been in operation since 2017, so international payments are already processed in minutes.

Bright future for FinTech

Financial technology is growing rapidly. In 2020 there were just four licenced electronic wallets: local firms STC Pay, Halalah and BayanPay, and the major global platform Apple Pay. In March 2022, SAMA announced it had granted a licence to the Etihad Fintech Company for Mobily Pay, bringing the total number of payment companies licensed by SAMA to 17, in addition to eight companies granted an 'In-principle Approval'³. SAMA also licensed two other FinTech companies, Lendo, a specialist in debt-based crowdfunding, and FinZey, which provides Sharia-compliant finance.



An important element in the growth of this sector is SAMA's Regulatory Sandbox⁴, a test and controlled environment where companies can test crowdfunding, P2P lending or investment platforms on a real audience without immediately complying with the regulations. Through this programme, SAMA creates a relatively safe and controlled environment where a business can fulfil its needs in cooperation with the regulator and under its supervision.

The Saudi Government is keen to attract both insurance and reinsurance companies, particularly those that offer property & casualty and health policies. It is encouraging foreign investors to buy local insurance companies⁵ while making it easier for new entrants to do business with measures such as lowering the licensing requirements



Banking is crucial to the Government's radical reshaping of the economy, in which private sector capital replaces finance from the public sector.



and simplifying the regulatory environment. Demand for services will increase, not least because it will be mandatory to have motor insurance for all vehicles and because the Government wants to enforce health insurance for small and medium-sized companies, as these currently have little coverage. There are also plans⁶ to provide universal private health insurance to Saudi nationals by 2023, which could double the size of the insurance market⁷.

Banking is crucial to the Government's radical reshaping of the economy, in which private sector capital replaces finance from the public sector. The sectors that are being encouraged under Vision 2030 – tourism, defence, recycling, entertainment and culture, as examples – require new sources of finance. Banks and services such as invoice discounting are also needed to boost lending to SMEs, while targets such as a cashless society also require a broader choice of banks. Hence, the Government is encouraging commercial and digital banks to attract foreign capital and to conduct services ranging

from corporate banking and treasury services to retail banking and cash management⁸.

There is a growing demand for investment banking, partly from Vision 2030 projects which rely on services such as fund and asset management, as well as from an increasing number of M&A and IPO transactions, and debt structuring and restructuring deals.

Another factor driving demand is that the country's capital market (Tadawul), is opening up to foreign ownership – up to 49% or, in the case of a strategic investor, 100%. Tadawul is also listing a greater range of investment products, including tradable funds, bonds and sukuk (Sharia-compliant bonds)⁹.

Having taken the bold decision to re-imagine its economy, the Saudi Government is taking significant steps to make the country an easier place in which to do business and offer significant opportunities to reward foreign investment. ■

¹<https://www.vision2030.gov.sa/v2030/vrps/fsdp/>

²FSDP Annual Report 2021, page 18.

³<https://www.spa.gov.sa/viewfullstory.php?lang=en&newsid=2341550#2341550>

⁴<https://lenderkit.com/blog/sama-regulatory-sandbox-guide/>

⁵Investment opportunity scorecard financial services – Insurance, September 2021, page 2.

⁶<https://www.fitchratings.com/research/insurance/saudi-arabian-insurance-dashboard-march-2022-02-03-2022>

⁷Investment opportunity scorecard financial services – Insurance, September 2021, page 2

⁸Investment opportunity scorecard financial services – Commercial & Digital Banking, September 2021, page 2

⁹Investment opportunity scorecard financial services – Investment Banking, September 2021, page 2

Navigating the cultural and legal challenges of doing business in Saudi Arabia

Andrew Renton, Founder & Senior Partner, Castletown Law



Andrew Renton

Complex legal and cultural challenges can seem daunting to many organisations looking to do business in Saudi Arabia. Andrew Renton, Founder of Castletown Law, explains how he is using his experience of living and working in Saudi Arabia to help clients across the energy and infrastructure sector in the Kingdom.

Many firms will perceive there to be a lot of difficulties in doing business in Saudi Arabia. It can take significant investment in time and money and it needs to be done with consideration and care. In the case of Castletown Law, we have forged strong links with a Saudi law firm, Al Amer Bin Ali and initial discussions with specialist firms in the energy sector are progressing. Jointly they have been listed in some of the government's advisory panels, but their core client business is in the delivery side of the energy and infrastructure sector.

As Saudi Arabia moves away from largely state-funded projects towards a project finance model for investment, there is a need for those participating to be guided through the risk matrix of the reality of delivering projects

in a country where the legal structures are complicated by a mixture of civil law and Islamic law, Arabian culture and western pre-conceptions of how to do things.

Castletown Law – How we work

- One of the strengths of Castletown Law is our experience in delivering projects in multiple international jurisdictions, adapting to the needs of the project in the local environment. We don't subcontract or delegate to local lawyers or firms, we take responsibility for delivering the service the client needs to deliver the project.
- We become part of the client's team and take responsibility for the scope we are charged with. We don't simply quote the law and leave the client to decide – we become part of the client's decision making process at all levels. It is this approach that binds us into relationships with our clients as we take the time to understand their business and make sure it is protected in the environment it is operating in.
- Our approach takes more than just legal knowledge; it needs a real understanding of what it takes to make

projects work in any given jurisdiction. It needs the understanding and foresight of pending and future changes – actual and potential – in the particular jurisdiction and internationally, and a way of explaining the risks arising from that perspective to the client.

- We do not assume that everyone understands the English language and English law, but rather that clarity of expression and respect for local law in the context of international projects is a critical factor.
- All our lawyers are senior professionals and we give direct advice at this level – we do not delegate downwards. We work through long-term structured relationships with fellow professionals we can rely on to work in the way we do and who will respect the need to deliver excellence in service to clients.

Castletown Law USPs

Andrew's engineering background has given him experience of practical delivery of projects across the Middle East. Andrew's legal work has built on that experience and provides a highly developed understanding of the risks and nuances in the sector.

Our clients like the fact that we are all experienced lawyers located across a number of jurisdictions focused only on the energy and infrastructure sector. As we mention above, we have a long and strong relationship with our partner firm, Al Amer Bin Ali in Riyadh.

What makes us different is that we use a direct advisory model, we are not from the usual mould using teams of lawyers. Our approach also means that clients get the benefit of advice very quickly and if we can't do something with the benefit of our experience and knowledge, we tell the client and agree how to manage it with them.

We were established as a digital and international practice, so that we can operate anywhere in the world. Before the pandemic, we adopted a Zoom-call culture, because we believed it was a better way to work with clients across the world, rather than waiting to catch planes and trains



Some of the areas Castletown Law has delivered its expertise

to attend meetings in person. This has worked to our advantage in maintaining connections with clients and alliance firms internationally. We do, of course, travel and meet clients face to face when the need arises. We recognise the importance of striking the right balance.

Doing business in Saudi Arabia

When it comes to doing business in Saudi Arabia, many firms try to get alignment along political relationships, rather than creating a profile of their own based on capability and experience. That's partly driven by the historic regulation in Saudi, which is changing in 2022. It meant you always had to have a Saudi law firm as your lead practice, so any international firm had to sit behind a local practice, which was largely driving the relationships that developed in Saudi Arabia.

The process of engagement has been very difficult due to these regulations, however this is going to change. Many Saudi businesses



Complex legal and cultural challenges can seem daunting to many organisations looking to do business in Saudi Arabia.



and Government departments were non-responsive – if you wanted to do work in Saudi you had to find your way through a maze to find the right person to speak to. Those apocryphal stories of going to meetings, sitting in a waiting room for hours only to be then told to come back tomorrow are real stories – we’ve done it!

One major challenge is the expectation challenge and what clients expect from you, going in as a lawyer. Lawyers in the West are used to being regarded in a certain way as they have a regulated and protected professional status. In Saudi not all lawyers are so regarded and most are seen as a consultancy service, so part of the challenge is thinking you are going to manage and control a situation, when the clients don’t see the lawyer’s role as being that.

Addressing cultural issues

We have worked in many countries and generally people you talk to want very similar things – to have a stable and happy place to live and to raise and educate their families. There are differences in the ways people live in Saudi from the way they live in the UK and differences in the way business is done.

The impact on business can be difficult to understand and that is why people get frustrated or concerned at what it is like to do business in Saudi. Business values are global and the basis of a good deal in Saudi is the same as in other countries, but people misunderstand this and think that, because it is Saudi Arabia, a good business deal will look different there than elsewhere.

The way you get to that deal can be different in Saudi from another country. You need experience and understanding of how the process of getting deals done works and you have to understand in Saudi

particularly, that in order for you to be able to advise a company there, you have to go and meet and build a level of trust and understanding.

A rich field of opportunity for UK business

The first thing anyone must do is find out about Saudi Arabia and its very rich history. Understand that this is a culture which is not based on the same origins as Western cultures and businesses. Don’t go expecting that they will adapt to your culture, but understand that they will expect you to adapt to theirs.

There are a number of key areas such as energy and infrastructure with major opportunities, and there is also population growth and an urbanisation occurring that leads to pressure on utilities, such as water supply and food supply in a country which imports virtually all its food requirements. Anyone looking for opportunities there should consider the various pinch points facing the future of the economy and the plans for the economic development of Saudi Arabia. This includes internationalisation of the economic development of new industrial facilities, growth of technology and leading-edge scientific developments and expanding a supply chain for support of imported goods which are essential to the growth pattern envisaged.

There is the opportunity for energy exports, including the potential for interconnectors into East Africa to power the economies there, and other countries which have supply chains into Saudi Arabia and participation in coalitions which will look at the energy and infrastructure needs across multiple states in the Middle East.

To learn more about Castletown Law and how the firm could help you in Saudi Arabia and elsewhere around the world, please visit www.castletownlaw.com or email andrew.renton@castletownlaw.com



CASTLETOWN LAW

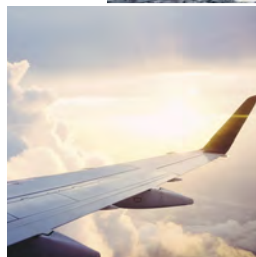
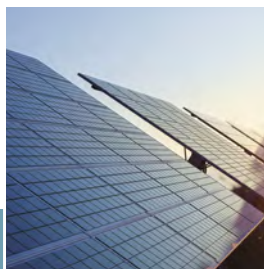
Castletown Law is an international law practice specialising in the Energy & Infrastructure Sector working with our Saudi qualified colleagues and committed to supporting the energy transition in The Kingdom of Saudi Arabia.

- Multiple international jurisdictions.
- Adapting to the needs of the project in the local environment.
- Responsibility for delivering the service, we do not delegate or subcontract.
- Our lawyers are senior professionals with years of experience.
- And our advice is delivered from a senior level.
- We take time to understand your business.
- An extension of your team.
- Recognising that your project needs more than just legal knowledge.
- We pride ourselves on long term, structured relationships.

Invite us in!



www.castletownlaw.com



Doing business in the Kingdom of Saudi Arabia

Sharif Moussa, General Manager, Equiom, Saudi Arabia



Sharif Moussa

Sharif Moussa, General Manager – Equiom , Saudi Arabia, discusses the economic landscape of the Kingdom of Saudi Arabia (KSA), the considerations for those looking to set up a business and guidance on how to operate a business once established.

The Kingdom of Saudi Arabia (KSA) is the largest Arab state, founded in 1932. It boasts the largest economy in the Middle East and is the 19th largest economy worldwide, as well as being the largest recipient of Foreign Direct Investment (FDI) in the Arab world.

Saudi Arabia is committed to developing its investment environment and is making strides to improve and advance the ease of doing business in the Kingdom through the implementation of 'Saudi Vision 2030'. Many such measures have already been introduced including allowing 100% foreign ownership of investment, no personal income taxes, low corporate tax rates and no restrictions on capital transfer abroad. Most recently, the Ministry of Investment has published the New Investment Strategy (NIS), which according to the Minister of Investment will transform Saudi Arabia into an investment powerhouse and global hub for business and talent. It is a strategy that invites investors

to seize the opportunities as Saudi Arabia unleashes its investment potential as part of Vision 2030 and enhances the economy's openness and competitiveness. The NIS looks across several sectors and aims to empower investors with a platform for opportunities, creating a competitive environment which will further push the private and public sector collaboration to grow and prosper.

Visitors to the country will notice the incredible changes that have been taking place in recent years, particularly following the announcement of Vision 2030. The shift in the culture brought about by an ambitious leadership vision is seen in full effect, and young nationals are now being encouraged to establish their own businesses, women are being empowered to join the workforce and the economy is benefitting from this change.

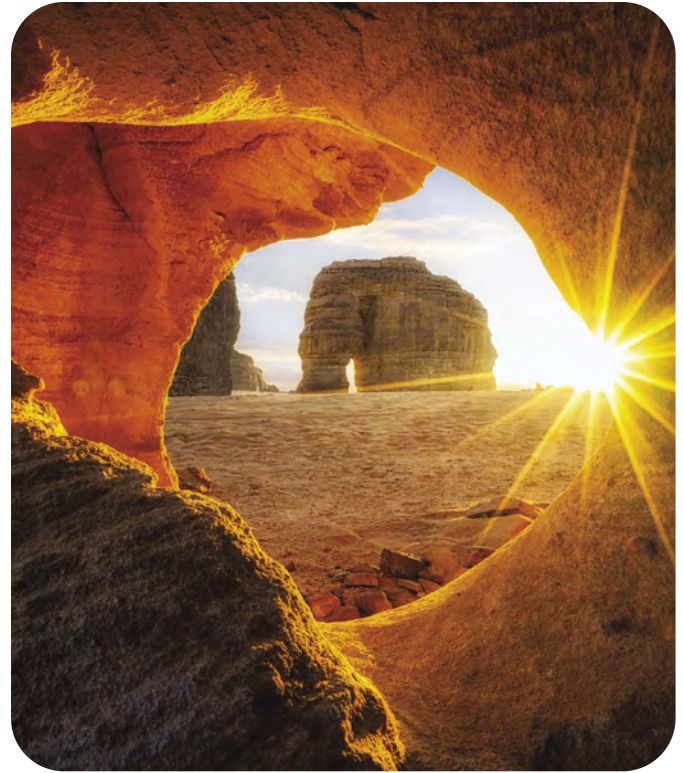
With a young and highly educated population of around 36 million, Saudi Arabia holds great potential and opportunity for investors. Its strategic geographic location means it connects three continents: Asia, Europe and Africa. This makes it a natural bridge to connect people, goods and services around the world and allows it to build on its role as an integral driver of international trade.

What investments are being made and what will their impact be for investors?

Vision 2030 is a hugely ambitious plan to diversify the economy of Saudi Arabia and reduce its dependency on hydrocarbons. To achieve this transformation, the private sector must take a front seat as a strong driving force for future economic growth and change. It was created as a bold step towards a transformation into a more sustainable economy. The Kingdom's Public Investment Fund will also transform to one of the largest sovereign wealth funds in the world, with US\$2 trillion in assets under management.

The Government continues to pursue economic reform and diversification programmes, and is continually investing in new ventures, having announced a US\$3 trillion investment in numerous Mega and Giga projects spread across Saudi Arabia. The largest and most prominent of these is the brand new 'smart city' of NEOM, a US\$500 billion project spanning 17 sectors. Other similar projects include Qiddiya and Dereiyah (entertainment and culture hubs), The Red Sea Project (an exquisite sanctuary), Al Ula (a living museum) and AMAALA (health and wellbeing centred around wellness and sports; arts and culture; and sea, sun, and lifestyle).

Saudi Arabia is determined to promote and push its agenda of tourism, cultural, housing and investment initiatives through several schemes defined by these giga projects. These ambitious landmark projects are already underway and will help transform the economy while showcasing Saudi Arabia's geographic wealth, cultural heritage, hospitality, and economic ambitions to the world.



Saudi Arabia has set itself ambitious targets for green energy usage. The target as part of Vision 2030 is to have 50% of the country's electricity usage being derived from green energy sources, and there is a specific focus on solar to generate green energy.

Additionally, the Government has invested heavily in the country's national infrastructure in a bid to attract foreign investments. The Government recently announced the opening of the retail and wholesale sectors to 100% foreign ownership and has launched an extensive privatisation programme. FDI is very much welcomed due to its ability to transfer technology, employ and train the national workforce, foster economic development and enhance local raw materials. ■



Equiom supports existing businesses and those looking to enter the Saudi market with business enabling solutions.



How can Equiom help me establish a company in Saudi Arabia?

Expanding into new markets is always challenging and it is natural for business owners to wish to keep their overheads as low as possible. Choosing the right license and structure from the start can save money and frustration in the long-term.

Equiom (through Equiom Group Middle East, based in Riyadh) supports existing businesses and those looking to enter the Saudi market with business enabling solutions. Our experienced team of advisors can help you prepare the necessary legal documentation ahead of incorporation – this ensures that you get your company commercially registered as quickly as possible using the most appropriate method of incorporation for you.

Who are Equiom?

Equiom are a global professional services company with a wide geographic reach and a broad service offering that complements regional, international, and multinational organisations. As part of a wider group it allows us to offer you assistance and support at all times.

For companies looking to establish a presence in Saudi Arabia, Equiom can guide you through the process, assisting with the most appropriate entry method, as well as offering market intelligence support and advice on the best route to entry, specifically designed for your company. Furthermore, our innovative and effective business partnering solutions mean we can guide and support you on a wide range of business activities, across 18 jurisdictions, with a strong presence and focus across the Middle East.

We are here to support you on your journey, ensuring you can get the most out of your business, even before you are established.

Thinking of setting up in Saudi Arabia?

Please get in touch with Sharif Moussa to find out more about how we can support your market entry and company formation in Saudi Arabia.

Sharif Moussa, General Manager – Saudi Arabia

Tel: +966 (0) 11 827 4058

Mob: +966 (0) 505 850 824

Email: sharifmoussa@equiomgroup.com

Web: www.equiomgroup.com ■

Professional Corporate Services in Saudi Arabia

Sovereign PRO Partner Group (PPG)

Sovereign PRO Partner Group (Sovereign PPG) is a leading corporate services provider in the Saudi market. Based in Riyadh, Sovereign PPG offers expertise, efficiency and transparency to international businesses and investors seeking to set up in Saudi Arabia, as well as providing the essential ongoing support services to ensure their commercial success in the Kingdom.

Saudi Arabia's Vision 2030 economic diversification initiative, is a paradigm shift from a public sector-driven economy to one the state intends will be driven by the private sector as the main engine for economic growth and job creation. Vision 2030 political, institutional, and financial reforms coupled with significant investment by Saudi Arabia's Public Investment Fund are generating opportunities for foreign companies across industry sectors – particularly the 'giga-projects' of NEOM, Qiddiya, Amaala, Red Sea, and Diriyah Gate – as well as in defence, ICT, renewable energy, mining and minerals, health, education, infrastructure, entertainment and tourism.

Our physical presence in the Kingdom, together with our strong regional presence across the Gulf Cooperation Council (GCC) states – Dubai, Abu Dhabi, Bahrain, Qatar and Oman offices – and our global office network spanning Europe, Asia and Africa, has enabled us to assist businesses from five continents to set up and deliver on their commercial plans in the Saudi market. Sovereign PPG's key services include:

- Government liaison and Government Relations Officer (GRO) support
- Company incorporation and secondary licensing
- Labour and Immigration

- Company Secretarial
- Payroll
- Accounting
- Structuring and resourcing

Sovereign PPG is committed to Saudi's National Transformation Programme, which aims to develop the necessary infrastructure and create an environment that enables the public, private and non-profit sectors to achieve the Kingdom's Vision 2030. We continue to invest in our operations across the Kingdom, in particular through the hiring of talented Saudi nationals, while ensuring that our technical knowledge and delivery capabilities are continuously updated.

Launched in 1987, Sovereign has since grown into one of the largest independent corporate and trust service providers in the world. We currently manage over 20,000 structures for a wide variety of clients – companies, entrepreneurs, private investors or high-net-worth individuals and their families – and our assets under administration now exceed £20 billion.

Our culture is entrepreneurial, but we are fully committed to maintaining compliance and promoting ethical conduct. We hold over 30 professional licences in the jurisdictions in which we operate around the world. To obtain these licences, Sovereign has demonstrated its financial stability, its probity, the professional competence and integrity of its staff and the robustness of its systems.

Email: ksa@SovereignGroup.com

Website: www.SovereignGroup.com

LinkedIn: [@TheSovereignGroup](https://www.linkedin.com/company/TheSovereignGroup) ■

Saudi British Joint Business Council



SAUDI BRITISH
JOINT BUSINESS COUNCIL

The Saudi British Joint Business Council (SBJBC) is a private sector led body with over 150 Saudi and British corporate members. Working closely with its members and strategic partners, it aims to strengthen cooperation at all levels between the business communities in the UK and Saudi Arabia. The Council is a not-for-profit company with offices in both London and Riyadh. It is co-chaired by Sir Sherard Cowper-Coles and Dr Emad Al-Thukair.

Our key objectives are to:

- Promote business and partnership opportunities in both Kingdoms
- Provide support and advice to SBJBC members and potential members seeking to do business in either Kingdom
- Offer a voice for business concerns in both countries
- Facilitate training, technology transfer and knowledge exchange between the UK and Saudi Arabia in support of Vision 2030 implementation.

One of the main benefits of SBJBC membership is access to high level governmental and private sector networks in both Kingdoms. We are accredited partners of the British Chambers of Commerce Global Business Network and the Federation of Saudi Chambers and have a close relationship with the Saudi Ministry of Investment and the UK's Department for International Trade.

SBJBC frequently holds networking events and roundtable discussions attended by Ministers, senior officials and business leaders. The Council also convenes formally at biannual meetings which alternate

between London and Riyadh. Aside from events, we circulate regular business updates to our members through monthly newsletters and a dedicated members' portal on our website.

The Council has a strong focus on growth sectors of the Saudi economy where there are good opportunities for investment partnerships and where the UK can offer expertise. These include renewable energy, technology, smart cities, education and tourism/entertainment.

We frequently lead UK delegations to Saudi Arabia and as a result a number of successful partnerships have been established. Technology and innovation continue to be key focus areas as Saudi Arabia modernises and diversifies its economy. SBJBC has recently launched a Saudi/UK Tech Hub (www.saudiukhub.com) to help connect the two tech-ecosystems and as a platform for joint events.

Our dialogue with the Saudi Ministry of Investment (MISA) allows us to discuss business environment issues and trade impediments. MISA arranges for representatives of concerned Ministries to attend. Late payments, licensing issues and work visas are amongst the areas on which we have achieved positive results. We are also engaging in the UK/GCC Free Trade Agreement negotiations through both Saudi and UK official channels.

SBJBC UK offers various tiers of membership, including founder, corporate and SME membership. We welcome new members from all levels, and encourage you to contact us at: info@sbjbc.org, or go to our website: www.sbjbc.org for more information on the Council and its activities. ■

Technology & Digital: Tech driving a digital future

Saudi Arabia has seen the future, and it's digital. The country is committed to a transformation that it believes will boost productivity and reduce costs.

The National Transformation Program, for instance, is committed to digitising the Government's administration, from notarisation and real estate archives to supporting and developing a 'digital judiciary ecosystem'¹. It includes a target to boost the digital economy's contribution to the country's GDP to 19.2% by 2025, from a baseline of 13% in 2017.

The Ministry of Communications and Information Technology (MCIT), which is responsible for developing policies for the sector, has set a goal of 50% growth by 2023, while simultaneously increasing the Saudi component of the ICT workforce to 50% by 2023. Digital transformation initiatives in the public, telecoms, finance, and oil & gas sectors are

driving growth, with particular emphasis on giga projects, smart cities and e-governance. This demand translates into growing opportunities within artificial intelligence (AI), cloud computing, cybersecurity, and the Internet of Things (IoT).

According to the Saudi Data and AI Authority (SDAIA), the data and AI economy is worth between £3 and £4.6 billion, rising to £101 billion by 2030 with support from SDAIA's multibillion dollar strategy.

Cloud computing has been a priority for Saudi Arabia since it announced its Cloud First Policy in 2019. This policy made it clear the Government wanted both the public and private sectors to adopt cloud-based services. It is clearly working. There has been a growth of 16% in cloud services since 2019. More is expected, as the current cloud infrastructure operates at a fraction of its capacity. According to MCIT, Saudi Arabia has 422 data centres, but an average utilisation rate of only 18%.

Another attraction for global cloud service providers is the country's strategic location, which would enable providers to service the whole MENA region, and fill shortfalls in what is available from local cloud providers.

Growing focus on cybersecurity

As is common across most other markets, cybersecurity is a growing issue, driving a market which is forecast to reach £4.3 billion by 2023. The growing focus on cybersecurity is led by the National Cybersecurity Authority (NCA), the Saudi Information Technology Company (SITCO), the Communications and Information Technology Commission (CITC), the Ministry of Interior, and the King Abdulaziz City for Science and Technology. The NCA has published regulations laying down the minimum standards for cybersecurity control, meaning that thousands of businesses now need support to implement the new rules.

The IoT and the development of smart cities are very much intertwined. The country wants to be the world's most connected and digitised nation by 2030. To achieve this aim, it is not only building 16 new smart cities, similar to the ground-breaking Neom development in the north-west of the country but also retro-fitting five existing cities with smart infrastructure to rank among the top 100 cities worldwide. Particular areas of interest include industrialised IoT, AI, cloud computing, and data centres, together with IoT solutions for asset tracking, fleet management, predictive maintenance and warehouse optimisation.



Saudi Arabia is already a world leader in mobile connectivity, having embraced 5G enthusiastically. The growth of these mobile services in the country plays a crucial part in its plan to modernise and digitise the economy as part of Vision 2030.

The CITC announced that Saudi Arabia would be the first country in Europe, Africa, and the Middle East to make the full 6GHz frequency band available for WiFi use. That means there are now 150% more open airwaves that routers can use for the new generation of WiFi networks. By allocating 1,200MHz of the radio spectrum for the WiFi 6E, Saudi Arabia has now made 2,035MHz of spectrum available for the new generation of WiFi and other license-exempt technologies.



Another beneficiary of the country's early adoption of 5G is the growth in its consumer electronics market, helped by its youthful demographic.



In terms of internet speeds, Saudi Arabia was the seventh fastest country globally for mobile internet speeds at the end of 2020, and fourth in the world for 5G internet speeds. In 2020, more than 5,000 new 5G towers were installed across the country, bringing the total to in excess of 12,000 by the end of the year. This number is set to grow as the allocation of spectrum for commercial uses continues to increase, as does the demand for faster internet services.

Increasing connectivity, through WiFi, 5G and broadband, is also contributing to the rapid growth of e-commerce. Current estimates show over 50% of the population shops online, up from 37% in 2016. The Government is actively recruiting global e-commerce players to set up regional headquarters to help serve local markets and address demand across the GCC².

Another beneficiary of the country's early adoption of 5G is the growth in its consumer electronics market, helped by its youthful demographic and the launch of new devices. Spending on consumer electronics reached £6.8 billion in 2020 and is expected to continue increasing. Now the country is in the market for content to help fuel this growth³: gaming, video on demand, digital audio and digital advertising.

The gaming market is forecast to be worth £1.9 billion by 2030. It is one of the fastest-growing in the world and is set to double in the next three years. Currently the 19th largest in the world, the gaming market is growing 41.1% year-on-year, with more than 21.2 million gamers across the country. The Public Investment Fund has even acquired more than £2.2 billion of stock in video game makers Activision Blizzard, Electronic Arts, and Take-Two Interactive Software. ■

¹National Transformation Program Delivery Plan, page 21.

²<https://investsaudi.sa/en/sectors-opportunities/information-technology/e-commerce>

³<https://investsaudi.sa/en/sectors-opportunities/information-technology>

Entertainment, Sports & Leisure: Showcase of opportunities

The transformation in the Saudi economic climate and the modern, future-facing approach is exemplified by the entertainment and sports industries, while the enthusiastic response perfectly illustrates the phrase ‘pent-up demand’. As ever, these changes have been spurred by the radical national development strategy set out in Vision 2030. This aims for household spending on entertainment and cultural activities to rise from 2.9% to 6%.

In just one of many moves to achieve this, the Government ended a 30 year ban on cinemas in 2018. By the end of 2021, there were 45 cinemas which had shown more than 1,000 films and the first Red Sea International Film Festival (RSIFF) was underway at Jeddah’s historic old town of Al Balad. It featured 138 films and shorts from 67 countries in 34 languages, 27 of which were from Saudi Arabia, and was seen by 30,000 people and 3,115 industry professionals, press

and students over its 10 day duration¹. The second festival will take place at the same venue in 2022².

The Government has established a range of authorities to promote and coordinate activity in the entertainment and sports sectors. Vision 2030 does not see the sector in isolation: it is integral to a range of ambitions, from improving the health of the nation, for instance, through promoting sport to encouraging tourism.

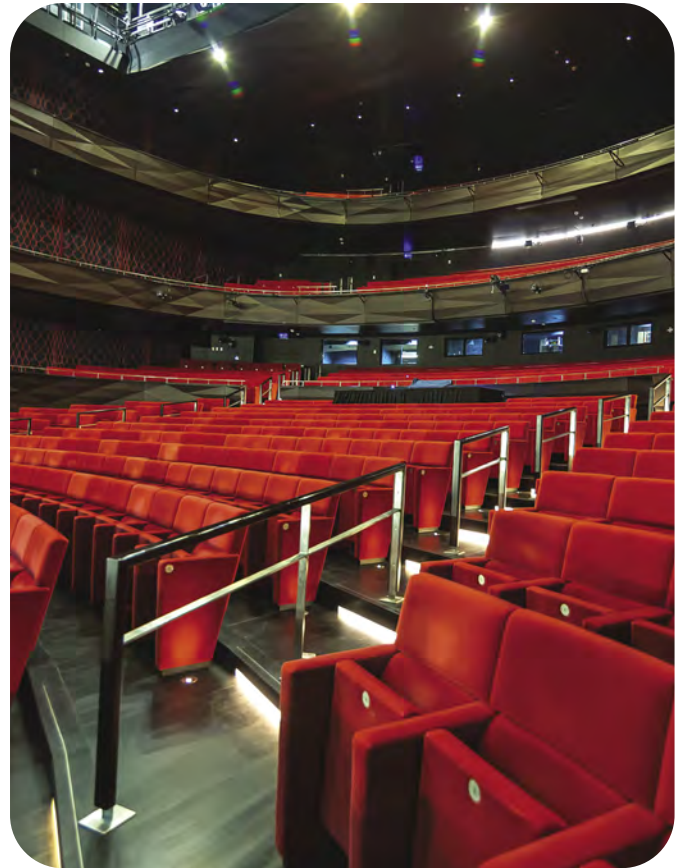
The General Entertainment Authority (GEA), established in 2016, is charged with developing the local entertainment industry and its infrastructure needs³. The Public Investment Fund (PIF), is also involved through Saudi Entertainment Ventures (SEVEN), its specialist implementation and investment arm. Similarly, the Ministry of Sports (MOS), regulates the sector, promotes

its activities and provides modern facilities to broaden the base of sports participants and achieve regional excellence⁴.

The scale of the Government's ambition was shown in 2020, when the PIF bought a 5.7% stake in the world's largest concert promoter, Live Nation, for £382 million. For its part, the public showed its appetite for entertainment through the success of initiatives such as the Saudi Seasons – an annual series of festivals in cities across the country offering a wide mix of events including auto shows, car races, and pop concerts. The demand for entertainment is also shown in official licencing figures: In 2020, the Government issued 117 permits for entertainment events, 219 licenses for operating entertainment facilities, and 398 permits for live shows in restaurants. Additionally, 180 investors received licenses to manage and develop artistic talents, and more than 410 restaurants and cafes registered to obtain live performance permits.

And there is more to follow. In January 2018, the GEA established a subsidiary, the Development and Investment Entertainment Company (DIEC), with an initial capitalisation of £2 billion, to act as both a planning body and investor in the entertainment industry. Both of whom have signed numerous agreements with foreign companies in sectors such as movie theatres, theme parks, vacation resorts and sports-related infrastructure.

In January 2019, the GEA launched an ambitious development and marketing strategy which will firmly establish the country as an international destination – one of the top four in Asia and among the



top 10 globally. The GEA has a budget of some £49 billion to spend by 2029 on developing entertainment-related infrastructure and creating 224,000 new jobs in the process. Some indication of its ambitions came just a few months later, in April when it signed an agreement with US movie theatre chain AMC Theaters to open 30-40 cinemas in 15 cities over the following five years, and a total of 50-100 cinemas in 25 cities by 2030⁵.

Entertainment and sports facilities are incorporated into every new development. Qiddiya planned to be the world's largest 'entertainment



The transformation in the Saudi economic climate and the modern, future-facing approach is exemplified by the entertainment and sports industries.



city', aims to attract more than 124 million visitors a year, with not only a 20,000 seater clifftop stadium, the world's largest Six Flags theme park, a world-class waterpark, cinemas and a performing arts theatre but also motorsports facilities and golf courses.

Riyadh's facilities, meanwhile, are to be boosted with the Sports Boulevard and the King Salman Park. The Boulevard will stretch 134km and feature green pedestrian pathways, cycling lanes, horse-riding tracks, and indoor sports facilities together with arts centres, museums, studios, libraries, and conference halls. The largest urban park in the world, the King Salman Park will include an arts complex, theatres, museums, cinemas as well as sports venues and a golf course.

Opportunities for constructing sporting facilities and managing large-scale sporting events are emerging, in line with the targets of

a threefold increase in participation in sports, as well as creating and hosting world-class events as a way of attracting globally respected sporting brands, championships and events to the country. It has already hosted the Diriyah ePrix, the PGA European Tour, the WWE Crown Jewel, the Saudi Cup Horse Race, and the Saudi Formula 1 Grand Prix. All these events require construction and management skills. For example, when the country landed 'The Clash on the Dunes' heavyweight title fight between Andy Ruiz Jr and Anthony Joshua, it needed a 15,000 seater boxing stadium to stage the event. This was delivered by the British company Arena, which built the spectacular Diriyah Arena in just 56 days⁶.

Examples like this show the potential across the whole value chain, from construction to catering to event management. ■

¹<https://www.screendaily.com/news/saudi-arabias-red-sea-international-film-festival-sets-2022-dates/5167386.article>

²<https://www.arabnews.com/tags/red-sea-international-film-festival>

³<https://www.gea.gov.sa/en/>

⁴https://www.my.gov.sa/wps/portal/snp/agencies/agencyDetails/AC038/lut/p/z0/04_Sj9CPykssy0xPLMnMz0vMAfIjo8zivQIsTAWdDQz9LQwNzQwCnS0tXPwMvYwNDaZ0g1Pz9L30o_ArAppiVOTr7JuuH-1WQWJKhm5mXlq8f4ehsYGyhX5DIHg4APGk69gl/

⁵<https://www.spa.gov.sa/viewstory.php?lang=en&newsid=1748341>

⁶<https://arenagroup.com/project/diriyah-arena/>

Building designs with a sustainable future

Shireen Hamdan, Senior Principal and Director, Populous



Shireen Hamdan

A global architecture and design business that has established a reputation for innovative sports stadiums, arenas and exhibition venues is growing fast in the Middle East. Shireen Hamdan, who oversees Populous' operations in the region, discusses the firm's activities and opportunities.

Could you describe Populous' history in the region?

Populous has been working in the Middle East for over 34 years, and in recent years we have opened the Coca-Cola Arena in Dubai, which was the first purpose-built arena in the region. Before that we had a number of major projects, including the Dubai Autodrome, Expo 2020 Dubai and the Qatar National Convention Centre.

We have been doing a lot of work in Saudi Arabia, providing support for three of the country's urban mega-projects and supporting the development of sports infrastructure. There is so much ambition in the country in trying to achieve its Vision 2030 goals, where they want to uplift socio-economic and living quality, so it is challenging, but a lot of fun.

What distinguishes Populous from other architecture and design businesses?

The stadiums and arenas we design come alive when you've got people in them, so the way we design always

brings people to the foreground. We always work with our clients in a collaborative manner on these projects, and have been doing so for more than three decades, with more than 3,000 projects to our name.

We have multiple disciplines within the business to deliver complete destinations that become part of the urban fabric, working with experts in place-making, revenue generation, branding opportunities, brand activation and wayfinding, as well as interior design. It becomes a holistic package that ensures a destination and an experience is all intertwined with the same DNA.

What do you like about working in Saudi Arabia?

I enjoy the rapid pace of change and the huge ambition to build the biggest and the best projects. That does not only mean landmark projects, but also grassroots community projects. Things are fast moving and Vision 2030 is incredibly aspirational and a cornerstone for development.

There is huge opportunity to support grassroots development across the country, which is something I am keen to explore, with sustainable initiatives also becoming increasingly important.

The construction side of what we are designing is quite straightforward because there have been ambitious

construction projects in Saudi for decades, so the whole country is honed for developing large and challenging projects.

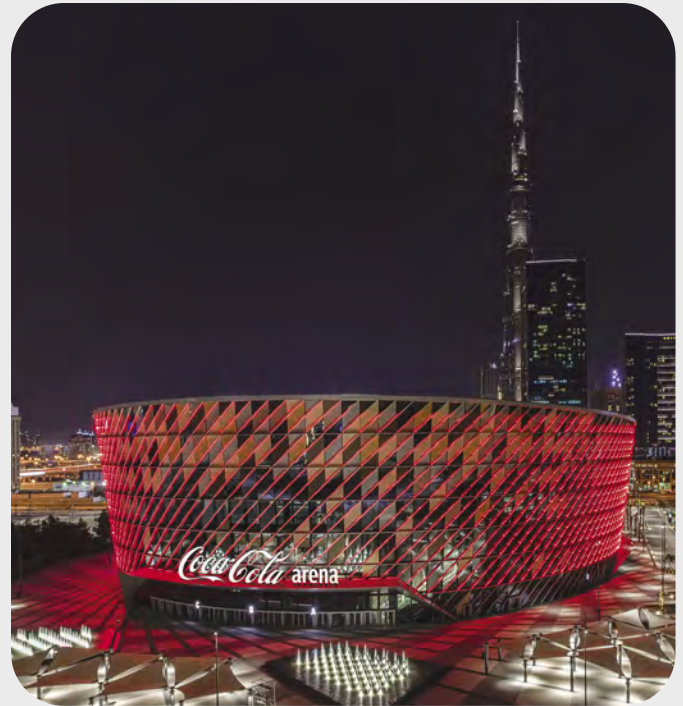
How do you approach each new project and what are your key considerations?

Every time we win a new project, we start by considering the cultural nuances, and always look to do something new and iconic or challenging. We work collaboratively with clients from the outset and right through a project life cycle, developing schemes that are contextually relevant to the communities they sit in. We have a consultancy practice that helps us support clients from project inception, so that the aspirations, revenue generation and client expectations are all aligned. We also have a design-led business planning service that supports us.

What drives the fan experience in your venues?

Fans of bygone eras had very different expectations to the fans of today. This is the Instagram and TikTok generation, so things have to be technologically integrated, with technology being a key part of our design and design development work, everything from touch screens to AR/VR technologies, and future-proofing our projects so that they remain relevant.

Creating a unique experience to attract people to venues is becoming more and more important in developing a venue, taking into account soundscapes and fan experience. Everything needs to be that much more smooth and seamless, to create the fluid experience which today's generation have come to expect.



Coca-Cola Arena, Dubai, UAE

How are you designing projects to be environmentally sustainable?

Sustainability and the environment are key considerations, not just for artists but for fans as well. Coldplay announced in 2019 that they would pause touring due to concerns about the environment and the sustainability of music venues. In 2021, their first concert in more than two years was at the Climate Pledge Arena in Seattle, which we designed and which is set to become the first net zero carbon arena in the world.

Making a new venue environmentally sustainable requires a multi-faceted approach to design. You don't want to design a venue that is too big, you want to have consideration for materials, the lifecycle of the building and its location. Venues that are located close to existing



We have multiple disciplines within the business to deliver complete destinations that become part of the urban fabric.



communities are far better and more relevant to people than ones that are sitting in the middle of nowhere. Accessibility is absolutely critical, as is construction methods and use of recycled aggregates as we did, for example, at the Tottenham Hotspur Stadium in London.

What is your approach to venue design?

We design in an inclusive manner, whether we are designing a stadium, arena or music venue. If you think about sports stadiums in the UK, 15 or 20 years ago they were more male-dominated, but if you look at the demographics now it would be roughly 60:40 male/female and substantially less in the Middle East, where our approach has been to create a more balanced and female-friendly environment with family zones.

In terms of the approach to each venue design, these are quite specialist buildings and are all different in the ways they operate, so there is a great deal of consideration given to the needs of both spectators and performers and an approach which matches event-day requirements with non-event day needs and how the building can be utilised on a daily basis.

How significant is Vision 2030 in driving the evolution of your Saudi business?

Vision 2030 is the blueprint for future development. We are currently looking at opening an office in Riyadh and have been hiring Saudi nationals who we have been training in the UK to understand our

building typologies and who will then re-locate with us back to Saudi. That will help us to become embedded in the culture and the cities we work in, and will help our Saudi employees understand the way we work.

Is your Middle East team made up of expatriates or do you also employ local talent?

We have always looked to employ local talent, as well as training university graduates and hiring experienced talent. This is an approach we are taking because our presence in Saudi is going to be for the long-term. We have hired a number of highly skilled individuals who have studied architecture in both Saudi and internationally, people with diverse portfolios and design skills and a real understanding of the culture, so they are a blessing to have on board.

What is your message to any business considering Saudi Arabia for the first time?

Commercially there are a lot of opportunities in Saudi. The approach to business has changed in the past decade and we find it quite easy and straightforward doing business here. Contracts are easy to manage, but I would recommend coming here to get an understanding of what the expectations and aspirations are. You really do have to be present to understand the country and culture. We have all become a Zoom generation over the past two years of the pandemic, but there is nothing to equal a face-to-face meeting and actually being here. ■

Tourism & Culture: Welcoming the world

One of the sectors that best illustrates the changes set in motion by Vision 2030, is tourism and culture. The target is for the travel and tourism sector to comprise more than 10% of GDP by 2030, compared to 3% today. The country expects to attract more than 100 million local and international visitors per year and become a leading international tourism hub by 2030, creating an extra 1.2 million jobs in the process.

To achieve these targets, the Government is combining regulatory reforms with major investment in tourism infrastructure. This is not only aimed at attracting foreign tourists, but also encouraging citizens to travel internally more frequently. Saudis spend around £20 billion on travel, shopping, and entertainment in other countries each year. The Government is hoping to bring at least the same amount back into the domestic tourism sector.

The preparations for this began in 2019, when a new visa category was created specifically for tourists. Before this change to the Tourism Law, foreign travel to Saudi Arabia was restricted to Muslim pilgrims – who received special visas to visit the holy cities of Mecca and Medina – resident workers and their dependents, and business travellers. Now, citizens from 49 countries can visit as tourists – all they need is to obtain an e-visa before they arrive or a visa once they have landed. This radical reform was accompanied by relaxing the rules for single female travellers and unmarried foreign couples, who can now book hotel rooms together.

Before the advent of Covid-19, the new regulations had made a significant impact. Within the first 10 days of the e-visa coming into effect, some 24,000 tourists had used these new regulations to visit the country. China was the largest source market in these early days, followed by the UK and the US.

Practical measures – inviting tourists into the country and providing somewhere for them to stay – are well in hand. Some 150,000 new hotel rooms will be built by the end of 2022, of which 70% will be funded by the private sector, and airport capacity is scheduled to grow to more than 100 million passengers per year by 2030.

Currently, religious tourism with pilgrims undertaking Hajj and Umrah, accounts for 19 million visitors annually and is the largest segment of the sector. The Government is determined to diversify and expand through investment in new resorts and the country's rich heritage – Saudi Arabia is home to six UNESCO world heritage sites and more than 4,000 registered archaeological sites.

A key part of Vision 2030 is to involve private sector expertise and investment in each area of the economy it is targeting, including tourism and culture. When the Ministry of Tourism launched its Tourism Development Fund in 2020, for example, it not only announced it would be investing £3 billion, but that it would also be actively seeking private sector investors to become involved in new growth opportunities.

Upmarket resorts in locations such as the Red Sea Project and AMAALA – dubbed the Riviera of the Middle East – will soon be available to wealthy tourists. The Red Sea Project offers an extraordinary variety of attractions ranging from dormant volcanoes, mountains, a marine life reserve and unspoilt beaches, to leisure and entertainment facilities. Scheduled for completion in 2023, the first phase will incorporate an airport, a yacht marina and 3,000 luxury and ultra luxury resort keys. It also has its special economic zone, complete with a legislative and regulatory system and streamlined visa requirements to attract jetsetters all year round.

Even more exclusive, AMAALA is aimed at the world's top 2.5 million ultra-high net worth travellers. Sited on the north-western coast, the resort is set in an area of 380 hectares and, once complete, will have 2,500 luxury hotel rooms, 700 residential villas and apartments, and a golf course.

The Government is also developing, with respect and sensitivity, cultural assets such as the cities of Al Ula and Diriyah. Al Ula features Mada'in Saleh, the second largest Nabatean heritage site after Jordan's Petra, among its many archaeological attractions. Now the city is being transformed to attract eco-friendly tourists interested in outdoor pursuits and cultural experiences, with activities such as camping, hiking and sightseeing.

Diriyah, on the northwest outskirts of Riyadh, is an iconic mud-brick city, the home of the first house of the Al Saud family and capital of the first Saudi state, with At-Turaif UNESCO World Heritage Site at its heart. The whole area is being sensitively transformed to showcase

the country's history and culture, while also providing an extensive range of facilities for shopping, entertainment, and dining. When the development is complete it will have eight museums and galleries, complementing more than 100 cafes and restaurants, 20 luxury hotels, a golf course, and a racetrack, among other attractions.

The official framework governing tourism and culture is based on the Saudi Commission for Tourism and National Heritage (SCTH), which regulates and oversees the sector. Its monitoring role is defined by the Tourism Law, which came into effect in May 2016. This states that all businesses in the sector – including accommodation establishments, tour operators, travel agencies and guides – must be licenced by the SCTH.

Apart from overseeing the sector, the SCTH is also charged with helping it grow and preserve the country's national heritage sites and antiquities. Within the SCTH, these responsibilities fall upon the National Centre for Tourism Human Resources Development (Takamul), and the Tourism Information and Research Centre (MAS).

In 2016, the Government reinforced the SCTH with two other organisations that are important in the sector: The General Authority for Culture (GAC) to promote Saudi Arabia's cultural offerings; and the General Entertainment Authority (GEA) to develop a local entertainment industry.

All these measures mean that many opportunities and tourism experiences are on the horizon as the Government opens the country's vast and varied landscapes, as well as its rich heritage and culture, to foreign visitors and investors. ■

Healthcare: Fit for investment

Saudi Arabia's commitment to improving the health and life expectancy of its citizens has already achieved significant benefits. It has bold plans to build on this in its next five year plan, the Health Sector Transformation Program (HSTP)¹.

In its first five years, under Vision 2030, average life expectancy rose to 75 years. The country has cut waiting times for receiving emergency medical care, such that 87% of patients were treated within four hours of arrival in 2020, compared with 36% in 2016. Mobile apps such as Mawid and Seha enabled patients to not only book appointments easily but also to conduct face-to-face consultations on their smartphones.

Saudi Arabia's great success in combating the Covid-19 pandemic showcased its capabilities when it coordinated one of the most effective national responses to the virus and avoided higher death rates².

These achievements are in the context of the healthcare sector being the largest in the Middle East, accounting for up to 17.7% of total Government spending in 2021³ – only education and military budgets are higher. This is likely to change, as the Government wants to reduce reliance upon the public sector. As HSTP⁴ states: "The cost of healthcare is increasing at a faster rate than the increase in national income."

The country is determined to achieve more, planning changes which will boost average life expectancy by a further five years – reaching 80 years – in line with Saudi Vision 2030 and life expectancy rates in G8

countries⁵. Currently, an average of 90,000 people die prematurely annually from chronic diseases including heart disease, stroke, respiratory diseases, mental health and congenital diseases.

Diabetes is another major health threat. In 2016, the number of people with diabetes reached 4.6 million. This is expected to almost double by 2030, rising to 8.4 million. The strain upon the healthcare service is amplified by the high rate of deaths and injuries resulting from traffic accidents, including costs of both treatment and rehabilitation.

Saudi Arabia has allocated £184 million to invest in air medical transport⁶ and prosthetics⁷. Air medical transport is a sector that the Government intends to prioritise – from £74 million in 2021 to £110 million in 2025. The demand, it says, will be fuelled by chronic conditions such as obesity, asthma, cardiovascular diseases, and diabetes, which will raise the demand for emergency interventions⁸.

The need for healthcare reform is also driven by population growth. The total is expected to increase from 33.4 million in 2018 to 39.4 million in 2030. Currently the overall demographic is young – nearly 60% are under 35 – but this will change over the next decade. The proportion of this population aged between 40 and 59 is expected to increase by 50% by 2035, so there will be a greater need for care for noncommunicable diseases. More of the population will also be aged 60 or more, so the country will need further elderly and home healthcare as a result. Overall, healthcare is forecast to grow strongly, moving from 4.7% of GDP to 13.7% by 2025.

With these predictions, the country is investing heavily, encouraging PPP programmes and introducing a comprehensive insurance system for Saudi citizens. The aim is that all healthcare will be free, procured centrally and delivered by 'health clusters'⁹. All hospitals and primary care centres will be allocated to these clusters, each serving approximately one million people. Each will consist of primary care centres, general hospitals, and specialised services. The Government is establishing the Center for National Health Insurance as the only national body covering healthcare costs. Funded by the Ministry of Finance, it will purchase services and sign contracts with these health clusters to provide free, quality care.

The country is also committed to investing in medical technology to serve patients more effectively and efficiently. A major part of its strategy is to ensure that 100% of the population is registered on its unified digital medical records database by 2025. The Saudi medical technology market is valued at £4 billion and is predicted to expand by 6% annually in line with rising demand and healthcare expansion¹⁰. The country imports 94% of its medical devices, and is keen to establish domestic manufacturing but, for the moment, this focuses on low-value supplies such as bandages, gloves, syringes and hospital furniture.

The vital contact for medical devices is the Saudi Food and Drug Authority, a well-established medical device regulator which follows international standards. Its remit is to have clear procedures which streamline licencing and the route to market.



The Government has recognised the challenges that its healthcare system faces and is acting determinedly to deal with them and is encouraging overseas expertise and investment. As a result, it is creating an investment-friendly environment in which the procedures, processes and regulations are transparent, effective and efficient. ■

¹<https://www.vision2030.gov.sa/v2030/vrps/hstp/>

²Health Sector Transformation Program Delivery Plan, page 19.

³<https://www.investsaudi.sa/en/sectors-opportunities/healthcare-life-sciences>

⁴Health Sector Transformation Program Delivery Plan, page 48

⁵Health Sector Transformation Program Delivery Plan, page 25

⁶<https://www.investsaudi.sa/en/sectors-opportunities/healthcare-life-sciences/Air-Medical-Transport>

⁷<https://www.investsaudi.sa/en/sectors-opportunities/healthcare-life-sciences/prosthetics>

⁸Air Medical Transport Investment Opportunity Scorecard, Healthcare And Life Sciences April 2021, page 2.

⁹Health Sector Transformation Program Delivery Plan, page 58

¹⁰<https://www.investsaudi.sa/en/sectors-opportunities/medical-technologies>

Pharmaceuticals & Bioscience: Growing in health and strength

Pharmaceuticals and bioscience is a priority sector for Saudi Arabia, as it looks to reduce its reliance on imports, encourage foreign investment and boost its skills and manufacturing base.

It is particularly interested in generic drugs and biopharma product manufacturing and is offering strong incentives to foreign investors. Currently, the country imports more than 81% of the generic drugs it requires¹. The National Transformation Plan aims to change this so that 40% of its pharmaceutical needs are met locally. Yet its ambitions go beyond simply reducing dependence on imports: it aims to be a major regional influence in both generic drugs and biopharma products.

Its vision is to accelerate the expansion of the local manufacturing companies and enable them to produce more complex drugs, with the ambition to become leading manufacturers and innovators in the Middle East-North Africa (MENA) region.

The main government bodies responsible for overseeing the development of the sector are the Ministry of Health (MoH), the National Unified Company for Medical Supplies (NUPCO), the Saudi Food and Drug Authority (SFDA), the Cooperative Council of Health Insurance (CCHI) and the National Center for Privatization (NCP). The first three cooperate in regulating, monitoring, controlling and procuring on behalf of the healthcare system. The MoH regulates all healthcare-related activities and services while NUPCO – on behalf of all public healthcare facilities – procures pharmaceuticals, medical equipment and supplies, and the SFDA monitors and controls imports and distribution of any of these that are imported, which is the overwhelming majority. The CCHI regulates the health insurance sector and the NCP enables the privatisation of those government assets and services recorded in Vision 2030.

The stated priorities for the biomedical science and pharmaceutical industry include areas such as clinical research, personalised medicine, value-based healthcare, artificial intelligence in drug discovery, and the local manufacture of biologics, vaccines, and cell and gene therapy².

To attract investors, the Government has relaxed restrictions on foreign investment, so there is a choice of different operating models – FDI with 100% ownership, or a joint venture with local private sector partners. There are also incentives such as a guaranteed offtake agreement and substantial subsidies to employ and train Saudi nationals. These include up to 50% tax credits on payroll and training costs for 10 years.

According to Government figures³, Saudi Arabia's pharmaceutical market is worth £6.5 billion, accounting for around 37% of the MENA market, and is on course to grow at a rate of 5.7% up to 2029. This increase is due in part to the growing population, but mostly to the rising demand for chronic disease treatment, as non-communicable diseases (NCDs) are estimated to account for 73% of all deaths. Demand for drugs is also projected to increase as the population ages, new pathogenic conditions are diagnosed, and personalised treatment comes to the fore.

Accordingly, the country has a high demand for drugs across several pharmaceutical segments including vaccines, with a market demand worth £490 million; systemic antibacterial £481 million; oncology £270 million; insulin and analogues £260 million; and immuno-suppressants £239 million⁴.

Pharmaceutical manufacturing is in its early stages of development and there are no major global entities in the country and only one large active pharmaceutical ingredient (API) manufacturer⁵. The

Government sees this as both a weakness that needs addressing yet, simultaneously, an immense opportunity to establish and operate a generic drugs manufacturing facility that has both local and regional markets available as an alternative to expensive imports.

The opportunities for biopharma product manufacturing are broadly similar to those outlined for generic drug manufacturing: no established global entities; no local manufacturing to speak of; and 100% importation of biological molecules. The drivers are similar too. The increasing prevalence of chronic diseases and a growing geriatric population is driving a demand which will increase as the population ages and new pathogenic conditions are diagnosed. Currently, the biopharma products in highest demand are human insulins and sclerosis products.

The former business model of simply shipping pharmaceutical products into the Saudi market has now been superseded. Instead, 'local' is the key: local production, technology transfer, local clinical trials, and training of Saudi nationals. The Pharmaceutical and Biotech Industrial Cluster, which defines the strategic priorities and identifies investment opportunities in the industry, prioritises the following sub-sectors: biologics and biosimilars; vaccine formulation fill and finish (FFF); sterile injectables (SI); solid oral dosage; active pharmaceutical ingredients (API); plasma production; and bioequivalence testing⁶. Investment in these sub-sectors qualifies for extra incentives such as up to 75% of project funding provided by the Saudi Industrial Development Fund, a two-year grace period in which to repay loans, export credit facilities from the Saudi Exim Bank and accelerated registration for certain products.



With this raft of measures plus a clear strategic plan, Saudi Arabia is well aware of the failings in its pharmaceuticals and bioscience sector and is determined to address them. Its tools for doing so include creating a generous climate for investors that will attract not only overseas expertise and investment but also introduce and embed skills within the Saudi workforce, to create a sustainable pharmaceuticals industry for the future. ■

¹Generic Drugs Manufacturing Investment Opportunity Scorecard Healthcare and Life Sciences; page 2

²<https://www.investsaudi.sa/en/sectors-opportunities/pharmaceuticals>

³<https://www.investsaudi.sa/en/sectors-opportunities/pharmaceuticals>

⁴<https://www.investsaudi.sa/en/sectors-opportunities/pharmaceuticals>

⁵Generic Drugs Manufacturing Investment Opportunity Scorecard Healthcare And Life Sciences; page 3

⁶<https://www.trade.gov/healthcare-resource-guide-saudi-arabia>

Transforming Saudi lives through skills development

The Lincoln College Group

The Lincoln College Group has more than 130 years' experience of delivering high-quality technical training, apprenticeships and higher education – all with a strong focus on meeting employer needs.

The Group is also one of the largest British providers of overseas technical and vocational education, industry training, workforce planning consultancy and senior leadership coaching.

Lincoln College International (LCI), which is a Saudi registered company, has been delivering education and training in the Kingdom of Saudi Arabia since 2014 – helping to support the Saudi 2030 Vision.

Our overarching approach is to deliver extraordinary education and training which is highly relevant to the needs of employers, hence our mission, “To be Employer-led; producing a highly skilled and productive local workforce”.

The Group's focus on quality is proven by our British provision being graded as ‘Good’ or ‘Outstanding’ by Her Majesty's Inspectors at the Office for Standards in Education.

Our Higher Education provision is graded ‘Silver’. Internationally, our reputation for delivery is strong, making a measurable impact on the lives of students and the future workforces in Saudi Arabia, China, Norway, Romania, Uzbekistan and the Eastern Caribbean.

Bespoke design to meet employer need

Our English, academic and technical training programmes are state-of-the-art and differ greatly from many off-the-shelf products – this customisation underpins our international success.

We tailor the design of our education and training programmes to the students', employers' and key stakeholders' specific needs. We have successfully worked across most sectors – engineering and manufacturing, hospitality and tourism, logistics, defence and security, energy and digital.

This includes working closely with industry to identify and embed work-ready attitudes and leadership skills. We are proud that the quality of our education and training is continuously recognised by external stakeholders.

Award winning

The Group has been commended for its overseas work through the UK Association of Colleges Beacon Awards and the Reach PLC Media Group's Exporter of the Year and Large Business of the Year awards.

Contributing to the Saudi 2030 Vision

We are proud to support the 2030 Vision and since 2014 we have enrolled over 15,500 full-time Saudi students across 24 different education programmes. It is great to see many of our graduates moving into exciting careers across the Saudi labour market.



Our overarching approach is to deliver extraordinary education and training which is highly relevant to the needs of employers



In recent years, our students have worked with Saudi Aramco at the Inspection Technology & Quality Assurance National Institute (ITQAN); gained international Bachelor degrees in Applied Engineering; supported the rapid growth of the Tourism and Hospitality industry; and provided significant opportunities for women to enter the workplace.

Cultural alignment

We have the skills, expertise, and cultural alignment to add significant value. We have an unmatched reputation and trust, based on designing and delivering outstanding KSA Academic Programme results for our partners, including the Colleges of Excellence (CoE), the TVTC, Ministry of Health and Saudi Aramco.

Guaranteed quality

LCI has been proven to implement rigorous and high-quality academic systems and processes.

We ensure pedagogic integrity, designing quality frameworks inspired by international best practices, including the UK Quality Assurance Agency Quality Code.

Human Alchemy

Human Alchemy, which is now part of Lincoln College Group, is an exclusive senior leader coaching consultancy that is based in Britain.

Working with CEOs and Executive Teams, its innovative programmes seek to unlock the true potential of senior leaders and leadership teams to create extraordinary businesses.

Human Alchemy will support you in creating and delivering a new vision for your business. We can deliver this exclusive 1:1 and small-group training in the Kingdom or online from the United Kingdom.

The Knowledge Ladder

Our data science company aims to support businesses to transform data into information intelligence and knowledge. We can work with you to achieve:

- Data dashboards and visualisation
- Machine learning and predictive analytics
- Geographical modelling
- Leadership development

Cyber security

Working with our UK expert partners we can assess your organisation's vulnerabilities, offer expert advice and produce bespoke training programmes ensure your staff minimise behaviours that could put your company at risk.

Our offer for your business

We would welcome the opportunity to hear about the challenges your business is facing and your plans for the future. We will be delighted to speak to you about our free Business health check which is:

- Tailored to your training and development needs and strategic direction
- Offers digital and face-to-face learning
- Meets industry best practice
- Informed by International and in-country experts

To book an initial consultation email: jfoster@lincolncollege. ■

Education: Skills for the future

Education is a key element in the strategy for the future. As the OECD notes: “Saudi Arabia has been investing heavily in its education sector for several decades. This investment has helped achieve tremendous success in expanding access, with present enrolment rates in primary and secondary education being nearly universal¹.”

In recent years, the country has spent more than £37.3 billion annually on education and human resource development. And this continues. In September 2021, the Government launched the Human Capability Development Program (HCDP)², one of the programmes devised to achieve the country’s Vision 2030 national development plan.

The HCDP aims to achieve several goals, including increasing kindergarten enrolment from 23% to 90% and placing two Saudi universities among the top 100 in the world by 2030, by which time it is anticipated that Saudi students will be achieving results that exceed international education averages.

The programme also intends to develop a more active partnership with private and non-profit sectors to achieve its aims.

There have been practical moves to engage the private sector in education and move away from state control of all schools. In 2018, Saudi authorities handed 25 state-run schools to the private sector, a move explained at the time as part of the Government’s economic reforms to ease the pressure on the state’s finances. Since then, the Government has approved a strategy to privatise 16 sectors of the economy, including education, while in early 2021 the Ministry of Education announced plans to privatise 60 schools within that year.

Education and training are also key elements in the National Transformation Program, developing the country’s human capability through a process of ‘Saudisation’, enabling Saudis to take up well-paid jobs in the private sector.

Increased unemployment, high population growth and low oil prices have also transformed the attitudes of potential employees. Whereas once they would only consider mid-to-high level positions – particularly managerial – today Saudis are more willing to consider jobs at all levels. The result is that more students are considering vocational and technical training within the country, and graduates

of training programmes in healthcare, agriculture and teaching, are steadily filling professional positions.

The Ministry of Labor and the Ministry of Education operate most of the vocational training centres, largely through a framework of PPPs. For example, major Saudi companies such as Aramco, SABIC and SAUDIA are key stakeholders in the National Power Academy (NPA), National Maritime Academy (NMA), and National Aviation Academy (NAA).

Basic training for civil servants is available from the Institute for Public Administration, established in 1961 as a semi-independent public agency. It has branches in Dammam and Jeddah, and a branch in Riyadh for women's courses. The Institute offers courses in administration, law, accounting, computer science, maintenance, personnel management, secretarial skills and management planning.

The demand for training goes well beyond the capacity of these academies and institutes. Naturally, the Government prioritises skills that are in high demand and provides specialised courses for specific industries. The most popular of these include computer technology, computer programming, technical and vocational training, office management, accounting & financial management, and marketing & sales. There is also a strong interest in English language programmes for professional development, particularly "Technical English". Hands-on training is also popular in engineering, with students choosing courses in machine tooling, metalworking, electro-mechanics and auto



mechanics. Similarly, training courses in the medical sector are in high demand – specialisms such as nursing, X-ray technology, emergency aviation, medical assistance, pharmacy and medical sciences are all much sought after.

Distance learning is also popular, as students value courses which are linked to reputable colleges and universities in the UK. This approach is also favoured by both government and private sector employers requiring technical courses to meet specific needs. British training and educational institutions can contribute further by providing English language courses, vocational and technical training, business management, accounting, and computer operation and management courses. The training itself is usually delivered either by visiting



In recent years, the country has spent more than £37.3 billion annually on education and human resource development.



lecturers and consultants or through working with local institutions to develop appropriate training materials and learning programmes.

Working in the education sector means collaborating with the various Government bodies in charge of maintaining the standards and meeting the needs of the job market. For instance, the Ministry of Labor controls the Technical and Vocational Training Corporation (TVTC). This in turn supervises the technical and vocational training programmes that go out to the country's industrial training organisations: colleges of excellence, technical colleges, and industrial institutes. The recently established colleges of excellence are state-owned and deliver courses such as business administration, hospitality & tourism, fashion & beauty, IT, and electrical technology as required by local demand.

The Ministry of Labor is also active in developing technical education outside the university system through several subsidiaries, principally the Human Resources Development Fund (HRDF) and Takamol, the Ministry's vehicle for PPPs. The role of the HRDF is to provide a

qualified workforce that meets the needs of the local job market. It does this by publishing studies on the barriers to employment and then funding the appropriate programmes, such as job placement centres, job fairs, online training platforms, and job preparation courses.

The largest users of externally sourced training packages are quasi-government organisations. Companies like Aramco, SAUDIA, the Saline Water Conversion Company (SWCC), SABIC, the regional offices of the Saudi Electric Company (SEC), the Royal Commission for Jubail and Yanbu, several branches of the military, and large organisations such as banks: all have their own training centres. Yet they all value expertise from the UK, Europe and the US and, in some cases, will contract out the training that they feel they cannot deliver in-house.

Outside the public sector and state-owned companies, budgets are more limited. Private sector companies often provide training for their employees, but will tend to either do it in-house or using local training facilities. ■

¹Education in Saudi Arabia, OECD Library

²<https://www.spa.gov.sa/viewstory.php?lang=en&newsid=2284076>

The business that's bringing happiness with every bite

Suryakant Pandey, Managing Director, Middle East, North Africa and India, pladis Food Manufacturing Company



Suryakant Pandey

Could you tell me about Food Manufacturers Company (FMC)?

Let me start by giving a bit of background on us in the market and how we form part of the pladis family. pladis, a British multinational food manufacturer, is the second largest biscuit manufacturer in the world, with operations in over 100 markets across the globe. The pladis family has a strong presence in the Middle East and North Africa, with the Kingdom of Saudi Arabia being a central market for us in the region.

We've been operating as the Food Manufacturers Company in the Kingdom of Saudi Arabia since 1999 and have expanded rapidly during that time, particularly in the past few years. In fact, we are now the market leader in biscuits*.

We produce some of the world's best-known brands including McVitie's, Ülker, Godiva and Rana. In Saudi Arabia, the Ülker brand is number one in the sweet biscuit market.

At pladis, our purpose is to bring happiness with every bite. With more than 75 brands across our global portfolio, each made with quality ingredients, trusted for generations and appealing to a broad range of consumers, our diverse portfolio helps consumers to enjoy life's happy moments, wherever they are and whoever they're with.

What do you produce and sell in The Kingdom of Saudi Arabia?

We have factories based in Jeddah and Riyadh, with our distribution network covering the whole Kingdom of Saudi Arabia.

This is where our master bakers produce our much-loved products such as the ÜlkerTea Biscuit, Biskrem, Halley and the Chocosandwich.

We produce more than 96 different biscuits, chocolate and wafers. This isn't just for our customers in Saudi, but also exporting to the Gulf, Levant, North Africa, Hong Kong and China – a truly global operation.

The Kingdom of Saudi Arabia is a really important market for us, and we are incredibly proud of the craftsmanship and innovation that goes into making our products. As we look to the future, we have plans to further invest and expand our presence here.

Could you tell me a bit more about your workforce?

We employ over 1,000 people with more than half of the workforce working in our factories in Jeddah and Riyadh.

We're really proud of the efforts that we have made to recruit Saudi citizens and continue to work hard to boost the Saudi female representation in our workforce.

*Source: AC Nielsen retail audit report

Currently, we have over 150 Saudi women working in our factories across the production line. We recruit across all ages, with a particularly large representation in the 26 to 35 age group.

Investing in the future Saudi workforce is something that is really important to us here – we want to attract the best people to come and work for us. We are constantly focused on developing local talent. As part of this we know that equipping young people with the skills to succeed in their careers is incredibly important to us, and that's why we are committed to fostering a collaborative, positive and purpose-led work environment.

An example of this is a sales programme for young talent, specifically designed to attract Saudi talent in sales.

Each person working at Food Manufacturers Company share the pladis commitment to bringing happiness with every bite. While each of our employees is unique, we all come together as one family of bakers and chocolatiers who work hard, with pride and with purpose.

Could you tell me a bit more about your work in the community?

We are committed to giving back to our customers and our communities.

For example, each year we celebrate 'Make Happy, Be Happy' day; an organisation-wide initiative within pladis where we work with local charities and organisations to help improve the lives of those living and working in the communities in which we operate.

One organisation we worked with in Jeddah is the SANED Association, a charity dedicated to helping children with cancer. They are an admirable organisation and we recently partnered with them to help provide the treatment needed for a number of patients. We plan to continue providing this support in the future.



What are your business ambitions in the Kingdom of Saudi Arabia?

Over the next few years, we will be investing further in innovation capabilities to adapt to the next generation of snacking needs. This will involve mastering new design methodologies to ensure that whether a consumer wants an indulgent treat, or a healthy energy boost, we will have their snacking solution. Ensuring that we are giving our consumers what they want is really important to us, and as health and wellness continue to be an ever more important factor for them, we will continue to invest in R&D to create new products to meet this need.

The Kingdom of Saudi Arabia continues to offer significant growth opportunities for our industry, further supported by Vision 2030.

We are excited about these opportunities for Food Manufacturers Company and look forward to bringing happiness to consumers in The Kingdom of Saudi Arabia for many years to come. ■

The leader in cold chain food logistics in KSA

David Scott, CEO, Asco Logistics



David Scott

The current business Advanced Storage Company or Asco Logistics commenced operations in Riyadh in 2013 on a 5,000m² site, and built a cold chain facility containing multi chambers and 3,000 pallet spaces in the Al Mansouria district.

This was joined by another purpose-built facility next door, also on a 5,000m² plot but holding 4,000 pallets due to the selection of the high-capacity racking systems selected to support the stringent operational requirements of the cold chain business.

In 2019, Asco Logistics launched one of the largest cold chain warehouses at the time in the Kingdom, with a plot size of 15,000m² and 12,500 pallet spaces, located within 31 separate chambers in the capital Riyadh. Again advances in racking technology allowed the business to maximise the pallet count per m² whilst always ensuring that the design complimented and enhanced services to the clients in the region.

Riyadh now with a total capacity of close to 20,000 pallets, is seen as one of the most advanced and professional cold chain service providers and is trusted by both major international corporations and the premium Saudi owned food manufacturers and distributors.

The latest stellar project to be launched by the Group is the newly opened facility in Al Khumra Jeddah, which boasts a land size of 21,000m² and a superb storage capacity of 21,500 pallets split over 23 separate chambers.

One of the keys to success for the business is during the design stage, where all chambers can be run singularly and temperatures can be set to a maximum of minus -25°C, so individual clients with varying requirements can be accommodated within the same facility. Essentially the business caters to frozen, chilled and ambient food products and has the flexibility to provide a service to most of the food industry in the Kingdom, whether it be for import or export purposes.

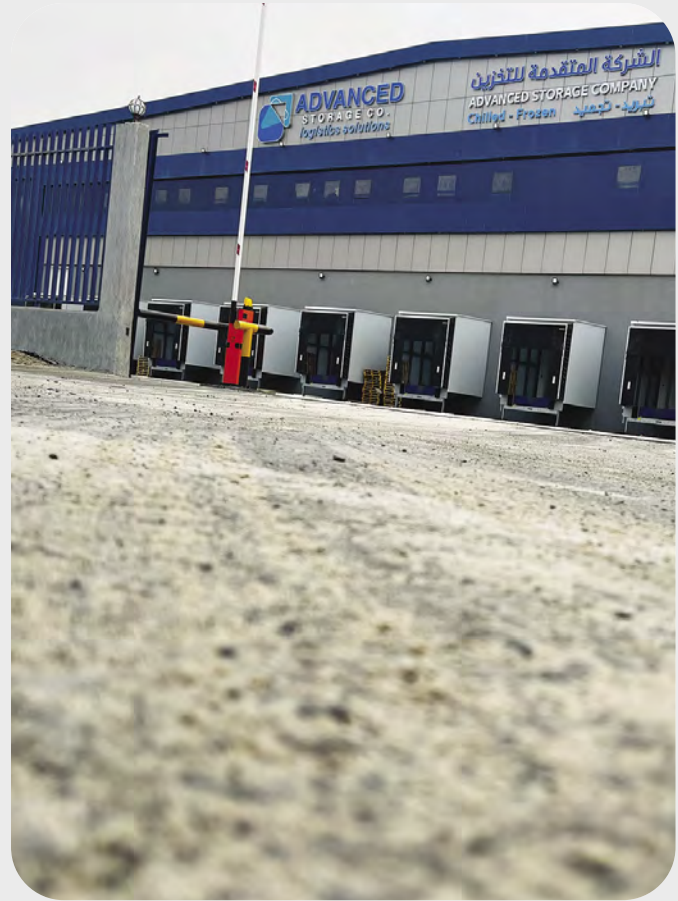
Asco Logistics very early in its development understood that not only building the best in standard warehouses in the Kingdom was sufficient but the complete integration with the best technological platforms available to support the crucial inventory and life cycle of products was necessary, along with a highly trained multiskilled and stable workforce.

CEO David Scott, a British national based in the region for 20 years stated, “Asco Logistics invested heavily in the purchase training and roll out of the Infor management system, which has proven to be a significant benefit to the client base with its adaptability and functionality being very much aligned to the food cold chain business.”

The business is continually looking to not only improve the services offered to clients but to lead the field in Saudi Arabia with bringing in new and innovative technologies that will enhance the food safety and cycle of products. Recently a significant investment was made to the existing facilities where the business will regulate the humidity as well as temperatures required for different clients in regions susceptible to high humidity levels for parts of the year.

Scott added “the growth plans of the business are extremely exciting for the owners as well as the large multi-cultural team already in place. The business model looks to establish a cold chain facility of varying sizes in all Saudi cities, with a capacity in excess of 500,000 citizens.”

The Saudi Vision 2030 has logistics as a key platform and becoming one of the world's most strategic logistics hubs. Ever increasing global food security issues and the implementation and policing of



international foods standards overseen by the Saudi Food and Drug Authority are key pillars in the expansion plans of Asco Logistics.

The key to the continuing success of the business in Scott's opinion is simple and involves supporting Saudi Vision 2030, in building world-class warehouse facilities, with absolute honesty and integrity within the Group, to invest heavily and to continually update the supporting technology, whilst providing a long-term employment career opportunity for all Saudi and multi-cultural staff. ■

Transport & Logistics: At the heart of global trade routes

Saudi Arabia lies at the crossroads of key international trade routes between three continents: Asia, Europe and Africa¹. With half the world's population accessible within a five hour flight, and 300 million consumers within three hours², taking advantage of this uniquely connected location represents a major opportunity for the country. A fact recognised by the Government in the ambitious plans set out in its Vision 2030 national development strategy.

"We have already invested heavily in the construction of ports, railways, roads and airports. To take full advantage of these investments, we plan to work with the private sector and enter into a new series of international partnerships to complete, improve and link our infrastructure internally and across borders. ... Air, maritime, and other transport operators will be encouraged to make the most of their capacity: achieving durable links between existing trade hubs, as well as opening new trade routes. This will reinforce our position as a distinctive logistical gateway to the three continents."

The Government's National Transport and Logistics Strategy aims to turn this vision into reality, positioning the country as a global logistics hub. One of its main objectives is to increase the contribution of the sector to national GDP from the current 6% to 10%. This will help to fuel business growth, expand investments, and increase the sector's non-oil revenues to an estimated £9 billion a year by 2030³.

Privatisation is key to this. In Vision 2030, projects undertaken by the Ministry of Transport and Logistics Services will be 20% self-financed,

creating significant scope for private participation in ports, airports, rail, and road infrastructure. The Government is also encouraging collaboration with private entities as it develops transportation infrastructure. Under the Saudi Foreign Investment Law, foreign investors can own 100% of businesses after obtaining a licence from the Saudi Arabian General Investment Authority (SAGIA) and can then bid on PPP projects directly or through a local consortium. Import and export processes are also being streamlined and governance structures and regulations are being reformed to facilitate market liberalisation and private sector participation.

As one of the world's fastest-growing logistics sectors, the Saudi market is valued at £14 billion, making it the largest among the GCC nations. The Government aims to raise Saudi's global ranking in the Logistics Performance Index from 49 to 25 and boost its capacity to welcome Umrah and Hajj visitors from eight million to 30 million a year.

In terms of maritime transport, the strategy is intended to create a capacity of more than 40 million containers annually⁴ through process re-engineering and automation, while reducing the time, cost, and variability of importing goods. So far, the average declaration clearance time at seaports has been cut in half to 2.2 days and at airports to 1.2 days, and the amount of import-export paperwork has been reduced by 75%. The predictability and reliability of the clearance process has also improved, with 40% of customs declarations in seaports now cleared within 24 hours and 70% within 48 hours.

Most recently, the Saudi Ports Authority, Mawani, has partnered with the National Shipping Company of Saudi Arabia, which trades as Bahri, to establish a 95,436m² integrated logistics park at the Jeddah Islamic Port. This will provide storage facilities for all inbound and outbound shipping containers⁵.

The strategy for land transport is to integrate with all the other elements of the transport network while building on its existing strengths: a network of more than 200,000km, including more than 4,800km of highways and bridges plus 59,545km of roadways which connect major cities and airports, railways and ports. This existing road network provides a high level of connectivity that compares well with global benchmarks, but the ambition is to make Saudi Arabia among the most advanced countries in terms of road quality and safety. To achieve this, the Government has introduced initiatives to reduce the number of road traffic accidents, implement the best global practices and develop public transport in cities. The country also has environmental targets, including a reduction in fuel consumption by 25%, enhanced sustainability, and the adoption of innovative global technologies to answer transport issues¹.

Ambitions for the road network include building up to 5,600km of new roads, including 284 highways that will link main cities and improve

connectivity to areas that are scheduled for development or have already recently been developed. These include the 2km Obhur Creek Bridge⁶, conceived as part of Jeddah's expansion masterplan, which will link the North Obhur region to the city's main transport links and form part of the main urban arterial road network.

Road safety plans in the pipeline will upgrade intersections and junctions, improve street lighting around dangerous intersections, enhance safety facilities at animal crossings, and install protective barriers for lamp posts and rumble strips to alert drivers to changing conditions⁷.

The plans for the transport and logistics sector will integrate with the establishment of Special Economic Zones (SEZ), intended to attract foreign investment and develop manufacturing with financial, trade and visa derogations. All goods at the zones with a pending status or those that are moved temporarily for maintenance or repair will be exempt from VAT. The first of these zones is at the King Khalid International Airport in Riyadh, called the Integrated Logistics Bonded Zone (ILBZ).

The warehousing market is forecast to grow strongly on the back of all the investment in this sector, together with a raft of factors including rising domestic consumer consumption, planned increases in manufacturing activity, the easing of government regulations and international trade. ■

¹Vision 2030, Kingdom of Saudi Arabia

²Saudi Arabia: Transport and Logistics Opportunities, Saudi Arabia General Investment Authority, September 2016

³<https://www.arabnews.com/node/1885636/saudi-arabia>

⁴<https://www.arabnews.com/node/1885636/saudi-arabia>

⁵<https://www.arabnews.com/node/2025436/business-economy>

⁶<https://www.rendel-ltd.com/projects/view/obhur-creek-bridge-and-secondary-bridges>

⁷<https://oxfordbusinessgroup.com/analysis/royal-roads-substantial-increase-road-building-has-improved-connectivity-and-generated-employment>

⁸<https://www.arabnews.com/node/1885636/saudi-arabia>

Making sustainable transformation a reality in Saudi Arabia

Eissa Aqeeli, Location Director Saudi & Bahrain, Worley

Steve Mabey, Vice President, Energy Chemical Resources, Advisian



Eissa Aqeeli

For more than 50 years, [Worley](#) has provided its world-class consulting, engineering, procurement and construction expertise to the energy, chemicals and resources sectors in Saudi Arabia and around the world. Eissa Aqeeli, head of the company's Saudi business and Steve Mabey, the UK based head of its consulting activities in the EMEA region, explain the Worley business and its key role in energy transition and sustainability.

Could you describe Worley and its activities in Saudi Arabia?

EA – Our history in Saudi Arabia is rich and varied. We have established partnerships with key industrial organisations like Aramco, SABIC and Ma'aden to help deliver their assets from concept to operations. Historically, we've worked on significant oil & gas, chemicals, petrochemicals, mining, fertilisers, and minerals projects. Over the years, we've evolved to provide solutions to embrace the changing energy landscape and adapt to business needs so that the local industry is served with the latest, best-in-class technologies.

Today, we have almost 2,000 employees in Saudi Arabia, with around half of them being locals. We're committed to Vision 2030 as the Kingdom aims to diversify its economy from reliance on oil. We appreciate the need for specialisation, and we're dedicated to lending advice to support this significant transformation effort, bringing in experience and expertise in new energy, digitalisation, and environmental projects.

For example, we're involved in the planned new zero-carbon megacity. We're also supporting efforts to optimise the national energy mix, which include transitioning to low-carbon and renewable energy sources like solar, wind and clean fuels.

SM – Eissa drives Worley's in-Kingdom activities, and our team in the UK offers a range of services including technical advisory services to support his team. Worley includes a consulting business, Advisian, and I look after the EMEA consulting team. Alongside Eissa and his team, we work on projects from concept to reality, helping our customers to obtain financing and release the funds to make their projects a reality.



Steve Mabey

What are typical Worley projects?

SM – Typical projects are within various sectors including conventional oil & gas, low-carbon and renewable energy, chemicals and fuels, mining, metals and minerals, sustainability and circular economy.

Advisian focuses on early project development, pre-feasibility and concept studies, where we help a customer develop its business case and technical solution for a project that it needs to deliver.

We provide all the inputs to develop a business case including the technical expertise, combined with the financial and economic analysis of that project – asking whether it makes sense, whether it fits the customer's requirements and whether it will deliver the returns that make for an attractive project.

Following this, our Worley teams will take the project through to the engineering phase and our in-Kingdom teams lead the engineering through to the construction, where we would typically manage the process on behalf of our customers.

How has the Worley workload changed over the past 50 years?

SM – Originally our work was focused on the upstream oil & gas sector, but over time it has progressed, and we now work with major customers such as Aramco in multiple sectors including downstream businesses like refining, petrochemicals, and power.

More recently, as those sectors have evolved, we've been supporting various customers in their energy transition and sustainability activities. This includes working on developments such as renewable, low-carbon fuels including blue hydrogen and blue ammonia facilities, and process decarbonisation to name a few.



To date, Worley has completed more than 3,300 energy transition projects globally including several complex and first-of-a-kind projects. Some examples we've been involved in include Europe's first waste-to-jet fuels plant, the world's largest carbon, capture and storage project and one of the largest commercial green hydrogen production facilities in the world.

Have you achieved your targets in terms of localisation?

EA – Saudi Arabia is pushing for more localisation, which is the employment of Saudis and this is something Worley endorses. We want to make sure we're part of that ecosystem of localisation. We have



We work on projects from concept to reality, helping our customers to obtain financing and release the funds to make their projects a reality.



a target of 70% local labour, which we haven't reached yet but hope to achieve in a couple of years. Today, we're close to 50% local talent and one good example of our commitment is that I'm the first Saudi to be leading the Worley business here, having begun working for the company in August 2020.

What are you doing to bridge the skills gap?

EA – Talent in Saudi Arabia is still in the early stages. In the past, Saudis preferred to work in government and public companies rather than for private or international companies. That has given us a challenge to attract people to the business. Normally, we're happy for people we've trained to work elsewhere because they are part of the ecosystem but that puts more pressure on us to hire and train more staff. And without having an expat coming to Saudi Arabia and working alongside local people you can't transfer that knowledge. So, we bring in experts to the Kingdom to train the locals through on-the-job training.

SM – In the UK, we invite representatives from our selected Saudi customers to come to our offices and spend time with us on an internship or secondment. This gives them an understanding of how

we do things and allows them to take that knowledge back to their organisations. From our side, it creates a stronger relationship for future activities and a network of secondees who have gone back into their organisations like the Ministry of Energy or Aramco.

What are you doing to help deliver sustainable energy?

SM – We're working with various customers to prepare decarbonisation and sustainability plans. We're helping to look at options to utilise natural gas to produce blue ammonia as part of the energy transition. Production of blue ammonia combines traditional gas synthesis with carbon capture and utilisation technologies and the ammonia can be deployed as a sustainable fuel for transportation, possibly shipping. We see blue ammonia as a sustainable fuel of the future and over the next 5-10 years, we expect the global market to increase. We're already supporting our customers by analysing options on how to produce blue ammonia potentially for export.

Another example is the work we're doing at the planned new zero-carbon megacity. Here we've been looking at the ability to produce green hydrogen utilising both wind and solar power. We conducted

the necessary studies on the technology for hydrogen production and water desalination using sustainable methods. The study work, business case and ultimately the engineering activity is something we can support with.

How would you characterise the business opportunities in Saudi Arabia?

SM – There are huge opportunities in Saudi Arabia. The fact that we're putting people into the location and have a very strong relationship between our UK and Saudi teams demonstrates our commitment and the potential we see in the opportunity presented by the Vision 2030 programme and beyond.

We're constantly exploring new opportunities to add value to the Kingdom's future aspirations.

EA – Saudi Arabia has committed to the targets set out in the 2015 Paris Agreement on climate change. More recently, the Kingdom pledged to reduce its carbon emissions to net zero by 2060, allocating more than US\$180 billion to the effort. We notice that every major organisation like NEOM, Aramco or SABIC is implementing environmental policies set by the Government.

The country has a strong energy grid but it's going to be upgraded further to handle more solar, wind and nuclear power generation. This will help to bring the cost of energy down. If you look at the IT sector for example, data centres are all about power so if you improve the power



supply infrastructure, that will drive more digitisation and help position the Kingdom as one of the preferred global locations for data storage.

The industrial, mining, oil & gas, power and water sectors all have the Kingdom's Vision 2030 goals embedded in their transformation and growth programmes. And Worley's role as a major enabler for new energy, materials and ESG-focused projects, will serve those goals well. ■

About Worley: We deliver project and asset services for the energy, chemicals and resources sectors around the world. We provide expertise in engineering, procurement and construction, as well as consulting services. Every day we help our customers get one step closer to solving our planet's complex issues, such as climate change, the energy transition, digital transformation and how we are delivering a more sustainable world. Follow us on [LinkedIn](#), [Twitter](#) and [Facebook](#). Or visit [Worley.com](#).

Renewable Energy: Committed to change

Saudi Arabia has ambitious plans to move away from oil and position itself as a world leader in renewable energies. The Government's eventual aim is for the country to generate at least 50% of its electricity from clean sources by 2030. It is already placed as the sixth country in the world for solar energy potential and 13th for onshore wind energy potential.

To underline the point, in 2019 the Government significantly raised the solar photovoltaic power target for 2023 from 5.9GW up to 20GW and increased the 2030 goal to 40GW. In addition, just before the COP26 UN Climate Change Conference in October 2021, it announced a net-zero target for 2060 and updated its Nationally Determined Contributions under the Paris Agreement. Together with the UAE, it then committed to investing £255 billion in net-zero projects covering renewable energy, storage, and hydrogen, which would include carbon capture, utilisation, and storage.

This commitment was reinforced with the creation of a new National Infrastructure Fund (NIF), complete with the appointment of the US asset manager BlackRock to help establish and operate it. Backed by Saudi Arabia's National Development Fund, the NIF has an investment target of £40 billion aimed at specific sectors such as power and water and is likely to further propel investment in renewables. The aim is to encourage domestic and foreign investment by diminishing the risk¹, both through credit guarantees and by participating in the projects by offering debt and equity.

Due to its position in the 'sun belt', which stretches from the west coast of North Africa to the eastern side of Central Asia, fewer countries have

higher levels of solar radiation than Saudi Arabia. Its climate and vast stretches of flat land are ideal for solar panel installations, with much of the infrastructure needed to connect solar power to the grid already in place.

In the country's northeast and central regions, as well as those near mountains in the west, there is enough wind to enable a large-scale economically viable wind energy industry to flourish. To be commercially sustainable, wind turbines need to harness average wind speeds of 6m per second. In Saudi Arabia's three most suitable locations, average wind speeds are consistently measured at 8m per second – 33% higher than the point at which wind energy becomes economically viable.

Its hot springs, meanwhile, are ideally suited for geothermal power generation. Al Khouba hot spring is considered the most important of at least 10 spread across the country that could be harnessed to produce geothermal energy.

Undoubtedly, the country has already achieved a great deal in a short time. At the beginning of the century, the solar capacity was a mere 0.35MW, rising to 2.35MW by 2010 and then, by 2018, rising to 84MW. This rate of acceleration continued, reaching 394MW by 2019 with the opening of the 300MW Sakaka PV plant, which connected to the grid in November 2019 and began commercial operation in Q2 2020.

The Sakaka plant is a landmark project as it is the country's first utility-scale renewable energy complex. Consisting of 1.2 million solar panels arranged over 6km², the project was implemented by the private sector

and set a new world record for low costs in the solar photovoltaic sector, which amounted to SAR 0.08775 per kWh².

At the opening of the Sakaka plant, the country announced two more significant developments: a further seven independent power producer schemes for approximately 3GW (2,970MW) of PV projects³ and the imminent opening of the country's first utility-scale wind power project.

All the PV projects have signed 25 year power purchase agreements with the Saudi Power Procurement Company as the off-taker. Three of these – Sudair, Jeddah, and Rabigh – reached financial close by mid-2021 and account for 2.1GW.

The largest of the three, Sudair, will produce 1.5GW and represents an investment of £680 million, £450 million of which will come from a consortium of local and international financial institutions. Though much smaller at 300MW, Rabigh is significant because it is one of the first renewable projects to make use of finance from an export credit agency, Japan's Bank of International Cooperation, which is investing approximately £58 million.

Wind energy is also a significant part of the 2030 Vision, as Saudi Arabia's goal is to install 16GW of wind capacity by then. As one of the biggest wind farms in the Middle East, the 400MW Dumat Al-Jandal is expected to generate enough electricity to power approximately 70,000 Saudi homes, while offsetting up to one million tonnes (Mt) of CO₂ emissions per year⁴. Estimated to cost £400 million, the onshore wind farm is being developed by a consortium of France based EDF Renewables and Abu Dhabi's renewable energy company, Masdar. The first phase of the Dumat Al-Jandal wind farm was connected to the grid in August 2021.

The Sakaka solar PV project and the Dumat Al-Jandal wind farm mark the first phase of the National Renewable Energy Program (NREP). The NREP sets out the strategy for delivering the renewable energy objectives of Vision 2030.

The Renewable Energy Project Development Office (REPDO), part of the Ministry of Energy, Industry, and Mineral Resources (MEIM), is responsible for putting the NREP into action, working alongside other government bodies, including the King Abdullah City for Atomic and Renewable Energy (KACARE), the Electricity and Co-Generation Regulatory Authority (ECRA), Aramco, and the Saudi Electricity Company (SEC).

MEIM also manages the commissioning of projects and enforces proper governance, so that procurement is open and fair. The criteria for selection are simple: tenders are awarded to the company or consortium that, while meeting the minimum localisation content requirement for that tender, puts forward the lowest levelised cost of electricity. These tenders must go through a purpose-built e-procurement portal and the selection of bidders, tendering procedures and the award of contracts are open to public examination. All bids are evaluated by an independent selection panel and, once the selection has been decided, the names of bidders are made public.

The clear, transparent process is further confirmation that, by leveraging its renewables potential and proven commitment, Saudi Arabia can establish a strong position in the rapidly evolving sustainable energy sector, as it works towards the ambitions laid out in Vision 2030. ■

¹<https://www.infrastructureinvestor.com/the-pipeline-blackrock-to-manage-saudi-infra-fund-vantage-debt-fund-first-close-macquaries-slow-renewables-deployment/>

²<https://www.vision2030.gov.sa/v2030/v2030-projects/sakaka-solar-power-plant/>

³<https://renewablesnow.com/news/saudi-arabia-clinches-ppas-for-close-to-3-gw-of-fresh-solar-737443/>

⁴<https://renewablesnow.com/news/masdar-edf-laud-first-power-from-400-mw-wind-farm-in-s-arabia-750215/>

Power:

Opening new markets

Saudi Arabia has bold ambitions for the future of its power sector, focused on three major challenges: increased demand, outdated infrastructure, and a historic over-reliance on subsidies.

Domestic consumption is returning to rise at 2% annually, following a slowdown due to Covid in 2020 and 2021¹. The country is the world's 12th largest consumer of generated electricity, yet relies on an outdated transmission and distribution infrastructure which it is keen to replace. It is one of the largest subsidisers of electricity in the world, spending £3.5 billion in 2020 alone².

To meet its increasing needs, it has to boost its power-generating capacity while reducing its dependence on liquid petroleum – currently 60%. This means upgrading the whole of the country's power generation, distribution and transmission system. The scale of this is massive. Estimates are that power-generation capacity needs to nearly double from 82GW in 2018 to 160GW by 2040. As a result, it is set to invest roughly £3.7 billion in generation and £3 billion in distribution.

The Ministry of Energy, Industry, and Mineral Resources (MEIM) – the Government agency that handles policy and planning in the power sector – plans to replace old substations, transformers, and other infrastructure to reduce energy wastage. Most of these improvement operations will continue towards 2030.

At present, the authority is the Saudi Electricity Company (SEC), which provides most of the electricity. It also carries out all transmission and distribution. But this will end. The plan is to privatise the whole industry, such that all electricity is generated by private companies

by 2025, helping to fund the significant investment needed to update power plants, boost efficiency and meet more stringent environmental standards.

Changes in the market have also boosted interest in devices which monitor energy consumption. The SEC is currently installing 10 million smart meters, enabling its customers to manage their consumption patterns for maximum efficiency³, in a programme expected to be completed in 2023. The introduction of smart meters also anticipates the introduction of renewable power sources, such as wind and solar, which are far more variable than hydrocarbon plants. Smart meters provide instant feedback over the internet, enabling the SEC to manage its energy usage far more effectively. Yet the market for devices which monitor and control fuel consumption goes far beyond smart meters, as tech-savvy consumers have shown in their enthusiasm for using mobile phone apps and following the success of these in the healthcare sector.

The same drive for energy savings has led the Government to create an overarching energy services company called Tarshid⁴ to galvanise the development of a more energy-efficient Saudi Arabia. Or, as it states in its mission: "Serving the Kingdom's strategic sustainability goal of achieving significant energy savings, without placing any burden on the Government's budget."

This is a wide-ranging mandate, it requires Tarshid to implement projects in public facilities and support capacity building and project development activities of new private sector electricity companies. So,

in the public sector, Tarshid is in charge of the programme to replace nearly 2.9 million streetlights with LED fixtures and cut energy costs by more than half⁵. In the private sector, Tarshid will, for instance, work with building owners and private sector energy companies to retrofit more efficient products.

On a wider scale, there are initiatives to link the country's electricity grid with those of neighbouring states or even the region as a whole. Since each of these states experiences different peak load times, these links would improve the efficiency of each country's grid through trading surplus electricity under the provision of the GCC Interconnection Authority (GCCIA), which owns and administers the super grid interconnecting the national grids of individual GCC member states⁶.

Since then, ambitions have become bolder – and won backing from the World Bank. At the first Pan-Arab Energy Trade Ministerial Conference – held in Egypt in 2019 – the League of Arab States, the Arab Fund for Economic and Social Development, and the World Bank reconfirmed their commitment to establishing a Pan-Arab Electricity Market⁷.

The key investments agreed upon include the creation of a Mashreq-Saudi Arabia Electricity Hub (Iraq-Jordan-Saudi Arabia), in addition to the Saudi-Egypt interconnector, which is already underway. This would see the projected power generation surplus in Jordan and Saudi Arabia provide electricity to Iraq, where a deficit exceeding 10GW is estimated.



It is an indication of the interesting and significant opportunities at every level within the Saudi power sector; from generation to distribution; both public and private sectors; commercial and domestic; and even international. ■

¹Enerdata, World Energy & Climate Statistics Yearbook 2021

²Chatham House, Five takeaways from a decade of energy subsidy reforms in MENA.

³<https://www.se.com.sa/en-us/customers/Pages/SmartMeters.aspx#:~:text=Meet%20your%20new%20smart%20meter!&text=Within%20a%20year's%20time%2C%2010,with%20a%20smart%20digital%20experience>

⁴<https://www.tarshid.com.sa/about-us/>

⁵<https://www.tarshid.com.sa/our-services/streetlights-retrofit/>

⁶<https://www.gulf-times.com/story/549605/GCC-power-grid-connectivity-seen-generating-33bn-over-25-yr-period>

⁷<https://blogs.worldbank.org/arabvoices/how-ramp-electricity-trade-between-countries-arab-world>

Oil & Gas:

A rich legacy that's driving a bright future

Saudi Arabia is committed to using its massive oil wealth to achieve stability, diversify its economy and create jobs for its people.

Its Vision 2030 national development plan sets out a rigorous, disciplined strategy to reduce the country's dependency on oil revenues. Instead, it aims to leverage its £350 billion Public Investment Fund (PIF) the sovereign wealth fund, to drive an ambitious spending push. In December 2021, it announced plans to invest up to SAR 1 trillion (£220 billion) by 2025, up from a previous target of SAR 150 billion. A resilient response to Covid-19 and rising oil prices are expected to further boost the Government's plans to reform and diversify the economy.

In the meantime, the latest full-year results from the national oil company, Saudi Aramco, posted in March 2022, showed net income increased by 124% to £83 billion in 2021, compared to £37 billion in 2020. The company benefitted from surging oil prices, with international benchmark Brent crude rising roughly 67% year-on-year. The company expects 2022 capital expenditure to be approximately £30-£40 billion, with further growth expected until around the middle of the decade¹.

The bulk of Aramco's spending is on upstream activities – exploration, developing and producing crude oil, natural gas and natural gas liquids (NGL) – to keep its position as the world's largest crude oil exporter. Its principal assets, Ghawar and Safaniah, are the world's largest onshore and offshore oilfields, producing crude oil, condensate and natural gas that is either processed at Aramco refineries or sent to its export terminals. The company also owns and operates the Abqaiq facility, the largest crude oil stabilisation plant in the world. In November 2021, it announced contracts worth £7.67 billion for subsurface and engineering, procurement and construction (EPC) at the Jafurah basin, which holds the largest liquid-rich shale gas play in the Middle East². The company expects capital expenditure on the project to reach £52 billion in its first decade of development.

Aramco has invested in downstream businesses which enable it to diversify its revenue while simultaneously optimising value across the whole hydrocarbon chain. It has integrated its oil & gas operations into its global downstream business, which consists mainly of refining and petrochemical manufacturing, supply and trading, distribution and power generation – together with base oils, lubricant and retail operations.

In 2021, it accomplished a major milestone in its long-term strategy in making its newly acquired chemicals business, Saudi Basic Industries Corporation (SABIC), into its dedicated chemicals arm, leaving Aramco itself to focus on fuel products. SABIC is a globally diversified chemicals company with factories in Europe, the US, the Middle East and Asia Pacific. Aramco acquired SABIC in 2020, making it one of the world's largest producers of petrochemicals.

For the future, Aramco remains confident in its traditional oil & gas businesses and will continue to invest billions to meet anticipated demand. It is also interested in working in related technologies, such as non-metallics. One example is to use non-metallic products to deal with corrosion, an issue for industries throughout the world. Aramco views this as a means to both boost demand for its products and simultaneously shrink its carbon footprint and expand the life cycle of investments. Non-metallic applications within the oil & gas sector include onshore and offshore piping, tanks, vessels, cooling towers, valves, pumps, as well as secondary offshore structures. Aramco itself uses non-metallic materials across many of its operations, including 2,414km in onshore applications, and some 80 conventional gas wells. The four key areas that Aramco sees as potential markets for non-metallic materials are automotive, recycling, building and construction, and packaging.



Saudi Arabia can see a future in the renewables sector and, in a far-sighted move to cover alternative options, is investing in two forms of environment-friendly hydrogen production: blue hydrogen, where the CO₂ generated in production is captured and stored; and green hydrogen, which is produced without emitting greenhouse gases.

Hydrogen only emits water vapour when burned, making it less polluting than oil, natural gas and coal. In March 2022³, construction began on the country's first green hydrogen plant, a £3.8 billion joint venture led by a consortium including Air Products and ACWA Power International, a Saudi utility. Called Helios, the plant is being built at the new Neom smart-city development in the northwest of the country. It will be powered by around 4GW of solar and wind power and is forecast to begin production in 2026.



Its Vision 2030 national development plan sets out a rigorous, disciplined strategy to reduce the country's dependency on oil revenues.



In October 2021, during Saudi Arabia's Future Investment Initiative in Riyadh, the Government announced its goal of becoming carbon neutral by 2060. Days later, Saudi Aramco announced that it had signed an initial agreement to build a new green hydrogen and ammonia plant with Hong Kong based green hydrogen developer InterContinental Energy⁴.

UK suppliers can find specific opportunities through Aramco's localisation programme, called the In-Kingdom Total Value Add (IKTVA). This is mandatory for all Aramco suppliers and is devised to support an increasingly self-sustaining economy while boosting long-term economic growth through increased investment, economic

diversification, job creation, and workforce development. This procurement process uses an algorithm to score suppliers by calculating how much of Aramco's spending will stay in the country or develop its supply chain and capabilities. To generate this score, or IKTVA ratio, suppliers must report information such as revenue, investments and Saudi payroll costs. This is then assessed against seven factors such as localised goods and services and supplier development funding.

The Saudi oil & gas sector is extremely healthy, with sufficient funds to invest in alternative energy sources, and is actively seeking investment and expertise to set it on an independent and sustainable course. ■

¹<https://www.aramco.com/en/news-media/news/2022/aramco-announces-fy2021-results>

²[https://www.aramco.com/en/news-media/news/2021/aramco-awards-contracts-worth-\\$10bn-for-vast-jafurah-field-development](https://www.aramco.com/en/news-media/news/2021/aramco-awards-contracts-worth-$10bn-for-vast-jafurah-field-development)

³<https://www.bloomberg.com/news/articles/2022-03-17/saudi-arabia-to-start-building-green-hydrogen-plant-in-neom>

⁴<https://www.argusmedia.com/en/news/2267651-saudi-aramco-plans-new-green-hydrogen-ammonia-project>

Water: Creativity begins to flow

Saudi Arabia is already taking major steps in addressing its water challenges through a diverse set of development goals, established under Vision 2030. These focus on a mix of privatisation, technological advancements, infrastructure development and regulatory reforms to solve the difficulties raised by being both the world's largest country without open surface water and having one of the world's highest rates of consumption. Its overall water demand stands at an estimated 25.29 billion m³ annually and is projected to increase to 25.79 billion m³ by 2025.

Having relied on desalinated water since the 1950s, the country is now the leading producer in the world, with a 7.6 million m³ daily production, accounting for 22% globally. Yet, as a result of ageing distribution systems and inefficient usage, it can lose up to 40% of its transmitted water on any given day – one of the highest loss rates in the world.

All these factors make the water and wastewater sector an attractive market for companies that can provide engineering services for the desalination and wastewater industries. The Government is leading the drive for investment. Local private sector companies also need foreign technology partners and lenders in order to bid on new contracts and build additional plants.

The documents setting out the strategic objectives are the National Transformation Plan and the Vision 2030 programme, which envisage

the greater proportion of desalinated water owned and produced by private operators. The aim is to raise £150 billion through privatisation and PPPs, as part of a National Water Strategy drawn up by the Ministry of Environment, Water and Agriculture (MEWA). This strategy aims to separate the water production assets from the transmission assets to strengthen competition, improve the quality of provided services, further economic development, and remove obstacles to investment. The National Water Strategy has set goals for nationwide wastewater coverage to grow from 65% in 2020 to 95%-100% by 2030, with strategic partners taking over the responsibility of 100% of treated water production also by 2030.

The Water Transmission and Technologies Company (WTTCo), established in 2020, is responsible for managing and maintaining over 8,370km of transmission, distribution, and storage systems that transmit more than seven million m³/d of desalinated water while adding more than 3,380km of new transmission lines, capable of distributing more than four million m³/d.

The state-owned National Water Company (NWC) has recruited the technical, legal, and financial consultants needed to partially privatise water and wastewater assets. Under the National Water Strategy, the NWC is inviting private firms to help develop 114 sewage treatment plants with a total processing capacity of 5.1 million m³/d, with the first phase tendering offers for 15 sewage treatment plants, accounting for nearly half of the country's treatment capacity

(2.5 million m³/d). The contracts cover rehabilitation, operational improvements, and capacity increases. While NWC will remain a significant shareholder in the treatment plants, one or more private sector firms will assume operation and maintenance activities.

This drive towards privatisation covers every element of the Saudi strategy in the water sector, including the desalination industry, which is dominated by the Saline Water Conversion Corporation (SWCC). This is a government-run organisation responsible for approximately 70% of desalination in the country (5.6 million m³/d). In January 2021, it had pre-qualified seven interested parties out of a pool of 37 for the privatisation of its largest asset, the Ras Al-Khair plant. It also has plans to privatise 11 desalination plants with a total capacity of 4.3 million m³/d, and nine sewage treatment plants with a combined capacity of 1.1 million m³/d.

Technological innovation and improved efficiency are integral to the Saudi response to its water shortage. For instance, the country is leading the world in revolutionising the desalination industry with its innovations in solar-powered plants. It built the world's first large-scale water desalination plant powered solely by solar energy: the £97 million, 15MW Al Khafji plant. This serves 100,000 people and helps to save 1.5 million barrels of oil per day.

Similarly, the country is committed to reducing leakage and waste. It aims to reuse over 90% of its water by 2040 (currently 65%) by transforming its existing and planned wastewater treatment assets into source water suppliers across most industrial sectors. Ultimately, the MEWA plans to reduce losses to 15% by 2030.

Its water reuse market is estimated as the third largest in the world after China and the US. Wastewater once treated and repurposed is cheaper than desalinated water, so one of the 2030 goals is to reuse all treated urban wastewater by 2025. The major player here



is the Saudi Water Partnership Company (SWPC), formerly the Water and Electricity Company, a purchasing agent of the SWCC and the Saudi Electricity Company. In 2020, it signed a deal to build the country's first independent sewage treatment plant which will serve as a model for future private sector wastewater initiatives.

The £183 million project, managed by a private sector consortium led by Dubai based Metito Group, will deliver up to 350,000 m³/d of wastewater from Dammam. The SWPC estimates the country needs a further 11 large-scale and 150 small-scale plants by 2030 to meet rising demand.

Another water source for non-potable uses is treated sewage effluent (TSE). The National Water Strategy aims to increase TSE reuse to 70% (nearly four million m³/day) by 2030. As ever, Saudi Arabia is open to overseas expertise in developing new, sustainable solutions to water issues. ■

Rail:

A faster future

Saudi Arabia has long been committed to developing its rail network – the crucial part of its ambitions to be a regional transport hub. As far back as 2010, the Saudi Railways Organisation drew up a 30 year Saudi Railway Master Plan to be delivered in three phases from 2010 to 2040¹. Its goal was to establish PPPs which would integrate rail into a multimodal network. This would then boost passenger and freight services while improving connectivity with neighbouring countries.

In 2021, the Saudi Railways Organisation merged with the Saudi Railways Company (SAR). Yet the ambition and the plan have not simply survived, but thrived. Vision 2030 states that its goal of creating a GCC common market depends on constructing shared networks as well as unifying customs, economic and legal policies², while the National Industrial Development and Logistics Program (NIDLP) sets out the actions to achieve these ambitions by 2050³.

The delivery plan also includes an increase in the capacity of the railway lines through these key measures: constructing a new station in Sudair; developing a signalling and communication system for Waad Al Shamal Railway, Jubail Railway, the new and old Ras Al-Khair Railway, the Ras Al-Khair Additional Facilities Railway, the Jubail Railway to Dammam and the Jubail Industrial Railway; and boosting the capacity of freight trains through securing locomotives and trailers for Sadara Company in Jubail⁴.

The most recent demonstration of the Government's commitment to rail came at the launch of the virtual Railway Industrial Opportunities Forum in March 2022 as part of the NIDLP⁵. It is intended to expand partnership opportunities between both public and private sectors.

Showing the importance of both rail and the new Forum, the Government used the launch to announce the first package of economic and

industrial opportunities worth more than £200 million. These included plans to expand the network by more than 8,050km, double freight and passenger capacity, and adopt advanced technical solutions to reduce rail's environmental impact.

SAR also called for expressions of interest to design, supply and maintain its next generation of inter-city passenger trains. The first trains are due to enter service in 2025 and will increase capacity on the Riyadh-Dammam line. Further orders could be placed for the Riyadh-Hail section of the North-South Railway.

Further proof of the opportunities that the rail sector offers came in 2022 when SAR awarded CAF, the Spanish rolling stock manufacturer, a five year, £167 million service contract. This contract includes technical support for the Saudi operator's 18 CAF-built push-pull trains, which operate on the Riyadh-Dammam and Riyadh-Qurayyat lines⁶.

The contract also includes an agreement to establish the Engineering Excellence Centre, a joint engineering department. This fulfils the jobs creation remit of Vision 2030 by upskilling local labour. The department will train SAR staff with the necessary operating and maintenance skills for the train fleet, as well as adapt SAR's facilities for the overhaul of the trains, which were delivered in 2015.

There are two other massive rail projects which are imminent: the 960km Saudi Landbridge Project, which will connect the two largest cities of Jeddah and Riyadh, and the Gulf Railway, also called the GCC Railway.

The Project has been under consideration since 2009⁷ yet is now reported as being deliverable by as soon as 2028. In 2018, SAR signed a Memorandum of Understanding with China Civil Engineering

Construction Company to implement the Saudi Landbridge⁸. The Italian engineering design firm Italferr and its local partner Arabian Consulting Engineering Centre completed the design in 2017. In addition to the line linking Jeddah on the Red Sea with Riyadh, the design also includes an option to extend the line from Jeddah to Dammam and Jubail. The latest news⁹ is that contracts will be signed before March 2023. The time for completion will be five to seven years, at an estimated cost of £20 billion.

The most recent plans¹⁰ for the GCC railway would link Saudi Arabia, the UAE, and Oman in the first phase, with a second phase linking Kuwait and Bahrain to other GCC states. Bahrain will develop the King Hamad Causeway, to build two tracks extending between Bahrain and Saudi Arabia, and as a causeway over the Gulf. The Kuwait National Railroad will link Kuwaiti seaports to other GCC states, with one connecting to Nuwaiseb on the Saudi border. Work is already beginning on the network in neighbouring GCC countries. In 2021, the UAE's Etihad Rail announced that it had completed the excavation of the longest railway tunnel on the Gulf Railway¹¹, the 1.8km tunnel that runs under the Al Hajar Mountains into the emirate of Fujairah. The tunnel is part of Package D on Stage 2 of the GCC Railway project. Package D has a length of 145km and connects Dubai and Sharjah through the Al Hajar Mountains and towards Fujairah.

In terms of urban transport, the country's largest project is the Riyadh Metro which, once fully operational, will serve 85 stations via six train lines, and will be integrated with a 1,900km network of buses with 3,000 stops. In December 2021, the Royal Commission for Riyadh City, which oversees the project, announced that all the construction and civil works on the 175km metro were completed and that the overall project was 92% finished¹². The announcement was made while initial tests were being carried out on two of the lines, running trains before handing them over to the operator, the Flow consortium, in the second half of 2022¹³. In line with greater privatisation goals, two 12 year operation and maintenance contracts were awarded for the network. The Flow Consortium of Alstom, Hitachi Rail STS and Ferrovie dello Stato Italiane, were awarded lines 3, 4, 5 and 6; while the Capital Metro Company, a joint venture between Saudi Public Transport Company and RATP Dev, was awarded lines 1 and 2. The contracts stipulate a minimum Saudisation rate of 45% and a 55% target for local procurement of supplies and services.

The Riyadh Metro showcases many of Saudi Arabia's complementary ambitions in the rail sector: boosting public transport and reducing car journeys to improve the environment and quality of life while providing jobs for Saudi nationals and enhancing the country's multimodal connectivity. Ambitions which also create considerable opportunities for external partners and investors. ■

¹<https://oxfordbusinessgroup.com/analysis/full-throttle-moving-ahead-local-and-regional-rail-network-integration>

²Vision 2030, page 58.

³National Industrial Development and Logistics Program Delivery Plan 2021-2025. Page 130.

⁴National Industrial Development and Logistics Program Delivery Plan 2021-2025. Page 130.

⁵<https://www.spa.gov.sa/viewfullstory.php?lang=en&newsid=2338253>

⁶<https://www.railway-technology.com/news/saudi-arabia-railway-contract-caf/>

⁷<https://www.railway-technology.com/projects/saudi-landbridge/>

⁸<https://www.meed.com/saudi-landbridge-china-ccecc/>

⁹<https://www.arabnews.com/node/2048671/business-economy>

¹⁰<https://insidearabia.com/gcc-railway-project-held-up-by-financial-problems-and-qatars-exclusion/>

¹¹<https://railway-news.com/etihad-rail-completes-excavation-of-gulf-railways-longest-rail-tunnel/>

¹²<https://saudigazette.com.sa/article/614806/SAUDI-ARABIA/Riyadh-Metro-project-nearing-completion-nbsp>

¹³<https://www.railjournal.com/regions/middle-east/riyadh-metro-testing-progresses-with-first-lines-on-course-to-open-in-2021/>

Aviation:

Saudi ambitions take flight

The planned growth of Saudi Arabia's civil aviation industry and the ambitions of its Government are both massive and co-dependent. Vision 2030 has to provide jobs for a young and growing country where more than 30% of the population is under 14 and more than 60% are under 35, while at the same time diversifying its economy to reduce reliance on oil revenues.

Plans for the aviation sector also affect other parts of the strategic blueprint. For instance, in 2021 the Government requested that companies move their regional headquarters to Saudi Arabia by the start of 2024 or miss out on government contracts¹. This 'Regional Headquarters Attraction Program' is expected to add £14 billion to the local economy and create 30,000 new jobs over the next decade. The country also believes it should, as the largest economy in the region, be the centre for business activity and travel. Achieving this, however, needs a step-change in air connectivity.

The General Authority of Civil Aviation (GACA) aims to deliver a transformation of the whole sector. Its target for 2030 is that the sector will be ranked first in the Middle East and that Saudi Arabia will be ranked fifth globally in terms of air connectivity, a goal achieved by offering more than 250 international destinations, up from 99 in 2019². Together, civil aviation and air transport will then contribute more than £57 billion to GDP, up from £15 billion in 2018.

GACA also aims to be ranked first in air freight in the region by increasing the capacity to 4.5 million tonnes in 2030, compared to 800,000 tonnes in 2019, and to more than triple the number of passengers from 103 million in 2019 to 330 million³.

But there is competition. The GCC is now a global tourist hub: according to the International Air Transport Association (IATA) in 2019, the Middle East accounted for around 10% of global scheduled passenger and freight traffic. All governments in the GCC are investing in civil aviation due to most of the major airports being nearly at full capacity. A new airport is being built in Abha to serve five million passengers annually, while another new airport has been planned for Jizan.

The authorities are keen to increase private sector involvement, enabling it to play an increasingly prominent role as both airport owners and operators. To help achieve this, GACA established the Saudi Civil Aviation Holding Company (now called Matarat) to prepare targeted assets for privatisation. Matarat has overseen the creation of the Riyadh Airports Company (RAC), which manages and operates Riyadh's King Khalid International Airport, and the Dammam Airports Company, which does similarly at King Fahd International Airport.

In February 2022 the sector took another step towards privatisation⁴: GACA and Matarat completed the institutional transformation of 25 airports and launched the Jeddah Airports Company and the Airports Cluster 2 Company. The latter will manage and operate 22 overhauled airports against international performance targets, bringing oversight for construction, operation, and management under central control. Meanwhile, the Jeddah Airports Company will develop Jeddah King Abdulaziz International Airport targeting diversification of profits, upgraded equipment and systems and enhanced passenger services.

Ireland's daa International⁵ was the first overseas company to benefit from and demonstrate the opportunities that the restructuring of the

airport business can bring. The company has signed a contract to lead, manage, and advise on operations, aviation business, non-aeronautical revenue and facilities at the Jeddah King Abdulaziz International Airport for a five year period, in cooperation with Jeddah Airports Company. The multimillion pound agreement with GACA expands on daa's existing activities in the country, where it has managed and operated King Khalid International Airport Terminal 5 for five years and has also recently been appointed airport operator for the new Red Sea International Airport.

Developing the aviation sector is part of the plan to become a destination for secular tourism. It expects to attract more than 100 million internal and international visits per year, up from 67.7 million in 2018, and become a leading international tourism hub by 2030, thereby creating an extra 1.2 million jobs in the sector by 2030⁵.

With these ambitions in mind, it is preparing to launch a new national airline based in Riyadh to complement low-cost airlines Flynas and Flyadeal. The latter, owned by the national airline Saudia, will focus



on religious tourism from its base in Jeddah and has ambitious plans to reach 135 mostly international destinations by 2030, up from 90 in 2019.

As a result of all these initiatives, there is a strong appetite for foreign investment and expertise which makes Saudi Arabia an appealing market. Yet it remains important to show a business can do more than simply deliver the service: and must add value, adding to Saudi expertise and capabilities. ■

¹<https://www.thearabweekly.com/riyadh-intensifies-efforts-woe-businesses-travellers>

²<https://www.spa.gov.sa/2318451?lang=en&newsid=2318451>

³<https://gaca.gov.sa/web/en-gb/news/january-4-2022>

⁴<https://www.saudi gazette.com.sa/article/616921/SAUDI-ARABIA/GACA-Matarat-announce-completion-of-institutional-transformation-of-25-airports>

⁵<https://centreforaviation.com/analysis/reports/irelands-daa-international-contracted-to-manage-jeddah-airport---opportunities-and-threats-602428>

⁶Vision 2030

Defence & Security: Keeping Saudi safe

Saudi Arabia is the sixth largest defence spender in the world. Only the US, China, India, Russia, and the UK spend more. According to its latest budget, the country will spend £35.2 billion on defence in 2022 – approximately 18% of its total spending¹.

Yet only a small proportion of that money is spent on goods manufactured in-country. The Government is determined to change this, using foreign expertise to develop its local aerospace and defence manufacturing, so that by 2030 it accounts for 50% of the sector's expenditure.

To make this transformation possible, measures have been introduced to make strategic partnerships with local manufacturers who are more attractive to global aerospace and defence players – and also to companies across the entire aerospace and defence supply chain.

It has also remodelled the procurement arrangements with measures such as the two military-industrial bodies established in 2017: The General Authority of Military Industries (GAMI), the regulatory body; and the Saudi Arabian Military Industries (SAMI), which contracts directly with foreign companies. It has also introduced a simplified online licensing process and now allows 100% foreign ownership for companies operating in the defence sector.

GAMI puts forward the policies and regulations concerning defence, while also managing military spending. This covers everything from arms and ammunition to military uniforms and maintenance contracts. Its approach is based on three 'pillars' – Military Acquisition, Military

Industry, and Military Research and Technology. These serve five strategic priorities: strategic autonomy, military readiness, sustainable local military industry, interoperability within and across entities, and transparency and efficiency of spending².

Created by the country's Public Investment Fund, SAMI operates across aeronautics; land systems, including military vehicles; weapons and missiles; and defence electronics. Its brief is to cut the country's reliance on imports while providing a secure supply chain of military products and services.

Both SAMI and GAMI work with the Ministry of Defence (MoD), which is in overall charge of national security and so includes the Royal Saudi Land Forces, the Royal Saudi Air Forces, the Royal Saudi Naval Forces, the Royal Saudi Air Defence Forces, and the Royal Saudi Strategic Missiles Forces. Other defence bodies include the Ministry of the National Guard (SANG), which defends the country's land, borders, properties, and maintains internal security and stability, along with the Presidency of State Security, which combines counter terrorism and domestic intelligence services.

Previously, the conventional manner of doing business in this sector required an agent but the Government now favours foreign investors who establish a local limited liability company or similar with a Saudi partner. This is often a condition of winning government contracts, with both GAMI and SAMI issuing a list of terms to be incorporated in the articles of association of these locally formed entities. More



The bold new Saudi vision, however, does mean there are significant opportunities for those companies that are agile enough to adapt.



recently, the Ministry of Investment (Moi) announced that by 2024, all international companies must have regional headquarters in Saudi Arabia.

To attract investors, the Moi has streamlined the process of getting the necessary license to start a business in the country, trimming it down to three stages. The first stage is to request an attestation for a contract from the Ministry of Foreign Affairs. Stage two is to apply for a business license from the Ministry of Investment. Finally, the establishment contract of the business must be authenticated and the commercial register issued with the Ministry of Commerce. All these services are provided online, so there is no need to attend any of the ministries in person.

Another requirement is that companies need the appropriate GAMI permits and licenses. Again, the permitting and licensing processes for these have been streamlined to encourage more local and international companies. This has been successful: in less than two years from the end of 2019, 99 companies had obtained licenses. The majority of these were awarded to companies operating in the field of military manufacturing (60%), followed by military services (24%) and trading of military articles (16%). The composition of these license

winning companies show the importance of local presence – 85% are local, 9% are mixed ownership while 6% are foreign³.

There is one issue that any UK company wishing to do business in this sector must bear in mind: the US is the major player and has been so for some time. Saudi Arabia imports nearly 80% of its arms from the US and is its largest foreign military sales customer. In February 2022, the International Trade Administration, part of the US Department of Commerce, reported that the US had made military sales worth US\$27 billion in the previous 12 months.

The bold new Saudi vision, however, does mean there are significant opportunities for those companies that are agile enough to adapt. The Government now requires companies to demonstrate not just that they are employing local labour, but also that they are actively contributing to building up the country's defence capacity in the longer term. This means that any sales or deals must be a 'win-win' and can be presented as such not just to the Saudi client, but also to the wider constituency – the country as a whole.

The companies most likely to succeed in this reform-minded, foreign investment-friendly climate, are those that can localise their organisation, labour force and processes faster than competitors. ■

¹<https://www.trade.gov/country-commercial-guides/saudi-arabia-defense-security>

²https://www.gami.gov.sa/sites/default/files/2021-07/GAMI%20H1-2021-ENG_0.pdf

³https://www.gami.gov.sa/sites/default/files/2021-07/GAMI%20H1-2021-ENG_0.pdf

Northern Ireland firms continue to achieve great success in Saudi Arabia

Steve Harper, Executive Director - International Business,
Invest Northern Ireland



Steve Harper

Steve Harper, Executive Director – International Business of Invest Northern Ireland, describes a decade-long connection between the Province and Saudi Arabia and explains what Northern Ireland has to offer the Kingdom.

Can you provide an overview of Invest NI's work in Saudi Arabia?

In brief, Invest Northern Ireland is the economic development agency for Northern Ireland, and we showcase the country's world-class multi-sector industry expertise to Saudi businesses. Our team has been based in the region for almost 30 years with over a decade in Saudi Arabia, which is particularly exciting during a period of rapid change with Vision 2030 focusing on economic diversification and growth.

Vision 2030 is true to its mission statement of being "An ambitious vision for an ambitious country" and we see tremendous opportunities for Northern Ireland businesses to play an even greater role in Saudi's ongoing transformation.

Today, Northern Ireland companies are already working closely with businesses across Saudi Arabia with their expertise being central to some of the Kingdom's most exciting work. The sectors cover life and health sciences, higher education, environmental management

such as construction and demolition waste, municipal solid waste management and energy from waste through to cutting edge technological innovation. They are also partnering with local businesses and industries to build knowledge transfer, infuse best practice and innovation, and overall future-proof the development of businesses across the country.

You have mentioned that Northern Ireland companies are already embedded in the Kingdom, can you provide a flavour of the type of work they are doing?

I would say Northern Ireland's support is multi-sector and multi-industry on the ground in Saudi Arabia. Just as an example, Co. Tyrone firm Kiverco was commissioned by waste management firm Averda to design build and install a waste recycling plant, which will help recycle all construction waste from the Red Sea Project in Saudi Arabia.

Added to this, Invest NI recently had the pleasure of hosting the senior management of Saudi Investment Recycling Company (SIRC) to showcase our global expertise in the manufacture of dry and wet waste recycling technologies and equipment. Led by Vision 2030, SIRC aims to set the standard by developing and operating projects to increase landfill diversion rates and boost recycling both regionally and globally.

Our companies are also supporting the Kingdom's ever-growing technology innovation. Tyco/CEM Systems for instance, a Belfast based leading provider of access control and integrated security management systems, provides control and security management systems to King Khalid University Hospital, as well as a number of major international airports in the region.

Similarly, CrowdVision, a leading automated pedestrian analytics and insights company is currently delivering real-time data to help manage crowds and ensure the safety of millions of Hajj pilgrims in Makkah.

Devenish, one of our leading exporters to Saudi Arabia, supplies animal feed supplements to the Kingdom's poultry and dairy industry, ensuring best-in-class standards for regional produce. Added to this, Northern Ireland headquartered businesses, Pritchitts and Greenfields are also actively supplying butter, cheese and milk powder, with Randox Food Diagnostics also growing in the country with its safer food solutions.

Finally, from a luxury perspective, Ulster Carpets has a long history in the Middle East, providing its premium carpets to a list of prestigious hotel clients and is working with Jabal Omar Development in Saudi Arabia. These are just a few varied examples that demonstrate Saudi Arabia's demand for Northern Ireland's world-class products and expertise.

Northern Ireland's universities are already committed in Saudi Arabia, can you outline their support?

I am very proud to say that both of Northern Ireland's leading universities, Ulster University and Queen's University Belfast have established a range of partnerships with universities in the Kingdom. Ulster has delivered a successful nursing programme for a decade in Saudi Arabia. In particular, Ulster's strong profile in tourism and hospitality (Ranked Number 1 in the UK for Hospitality, Complete University Guide) aligns with Saudi Arabia's Vision 2030 and the drive towards transforming the Kingdom's tourism sector. Ulster is also strong in a range of other areas including pharmacy & pharmacology (Ranked 2nd in the UK, Guardian 2021) and optometry and orthoptics

(Ranked number 1 in the UK, Guardian, 2020) which have remained popular choices for Saudi students.

Queen's University Belfast also has close ties with the Saudi higher education sector. This includes a partnership with the University of Jeddah in a range of disciplines at postgraduate taught and research level. Furthermore, the University is working with Saudi Ministries of Health and Interior in training and development of the Saudi healthcare workforce including doctors, dentists and nurses. Currently, there are more than 150 students from Saudi Arabia studying for various undergraduate, postgraduate and research courses, which include The Centre for Secure Information Technologies (CSIT) at Queen's University Belfast. These examples demonstrate how Invest NI, and Northern Ireland as a whole, are supporting Saudi Arabia as it delivers Vision 2030.

How do you see Northern Ireland's contribution to the Kingdom developing over the next 10 years?

It will no doubt grow significantly as Northern Ireland continues to work closely with its Saudi partners across the healthcare, waste management, education, technology and cybersecurity domains to name just a few sectors. This not only plays to the current strengths of Northern Ireland's portfolio of industry expertise but also to our new and rapidly evolving expertise across tech innovation, fintech and advanced engineering. These hybrid capabilities uniquely position our region to play a key role in supporting the Kingdom's efforts to achieve its Vision 2030 and subsequent longer term ambitions.

Whilst we may not share the same weather as we often joke with our Saudi friends, the people of Saudi Arabia and of Northern Ireland have many similarities, the importance of family, a spirit of innovation, of resilience, with the robustness to adapt and change when faced with challenges and ultimately achieve tomorrow's goals. I look forward to continuing to foster a close partnership between our regions, as, together, we build new and better futures, which will benefit all of our societies. ■

UK

Industry & Infrastructure: Towards a smart future

For more than a century, the UK has developed an advanced engineering industry which has evolved into a complex network of companies delivering precision products and specialist services across the industrial supply chain.

Most recently, there has been substantial progress in developing high-growth areas such as low carbon technologies, digital process engineering, 3D printing or 'additive manufacturing', robotics and autonomous systems.

In the manufacturing sector alone, there are more than 100,000 companies. As digitisation within the sector advances, investments into automated processes could potentially add more than £200 billion to the economy each year¹.

The UK is also at the forefront of the development of advanced materials such as graphene. The thinnest, lightest, strongest and most conductive material for both electricity and heat, it promises to revolutionise industries such as electricity production, photovoltaics, batteries, drug delivery and DNA sequencing.

On track for growth

The UK has one of the world's most highly developed railway sectors. It employs 240,000 people and comprises a complex 16,000km network, reaching all parts of the country.

The sector has been around for almost two centuries, it has been greatly enhanced by a number of key projects in recent years.

A signature example is High Speed 1 (HS1) – the UK's first high-speed railway. Linking London to Paris in just two hours at maximum speeds of 300km/hour, it is the first railway to run entirely on renewable energy.

The current UK's high-speed rail project HS2 is well underway and on completion, will provide a high-speed link from London in the south, via the Midlands through to the north of England.

Through these projects, companies are developing digital and low carbon technologies which are improving performance for users, and will significantly contribute to the 2050 net zero targets.

Building more sustainable utilities infrastructure

Within a highly regulated environment, the Government and industry are working together to address climate challenges – not least in the utilities sector. With an annual £122 million water research and innovation budget, research institutes are known internationally for their work on freshwater ecology, treatment technologies, urban drainage, and flood management solutions².

Likewise, since 1990 the power sector has reduced its emissions by 72%, primarily through an Electricity Market Reform (EMR) to

incentivise investment in secure, low-carbon electricity, and improved the security of electricity supply and affordability for consumers.

The Government is keen to improve the amount of power produced by renewable sources to help drive the transformation of industry and infrastructure to meet their net zero targets.

In its 10 point plan for a 'green' revolution, published in November 2020, the Government committed to deploying 40GW of offshore wind power by 2030. This is four times more than currently produced and enough to power every home at current usage levels. More needs to be done, however. The Climate Change Committee has suggested the UK will need 140GW to meet its net zero ambitions and respond to increasing demand for clean energy from both homes and industry³.

Towards tomorrow

New technologies are set to transform efficient and sustainable productivity over the next few years, in what has been termed the Fourth Industrial Revolution, or Industry 4.0.

Supporting this drive, the Government is targeting R&D investment in both the public and private sectors to reach 2.4% of GDP by 2027. Around 4,000 engineering companies with more than 100 employees are likely to invest in robotics, and 71% of companies with

an annual turnover of £10 million or more are interested in automating their processes⁴.

The Made Smarter Review is an industry-led review exploring how manufacturing can maximise the benefits of adopting digital technology through a strong industry and government partnership⁵. It is also part of the industrial strategy. It has made recommendations to transform the landscape for manufacturing through the adoption of new technologies.

Another initiative, the High Value Manufacturing Catapult, provides innovation support for businesses with growth potential in strategically important global markets⁶. With more than £200 million in Government investment since 2011, it has greatly accelerated the development of new manufacturing technologies.

Decarbonising industrial clusters will be another essential component to the UK reaching its 2050 net zero targets. It will mean the deployment of carbon removal technologies such as Carbon, Capture, Usage and Storage (CCUS) and Bio Energy Carbon Capture and Storage (BECCS). Although CCUS technologies attracted £815 million of funding in 2020, Energy UK, the trade association for the energy industry, suggests there is much scope for further funding models for strategic large-scale CCUS and BECCS projects. ■

¹<https://www.great.gov.uk/advanced-manufacturing>

²<https://www.great.gov.uk/water>

³<https://www.nationalgrid.com/stories/energy-explained/what-offshore-wind-power>

⁴<https://www.great.gov.uk/advanced-manufacturing>

⁵<https://www.gov.uk/government/publications/made-smarter-review>

⁶<https://hvm.catapult.org.uk/who-we-are/#what-is-catapult>

Innovation & Technology:

A new kind of industry

The UK is one of the world's premier digital economies. It is home to thousands of established technology, business and entrepreneurial start-ups leading the digital transformation across some of its largest industry sectors¹.

The World Intellectual Property Organisation's (WIPO) 2021 Global Innovation Index named the UK the fourth most innovative place in the world out of the 131 economies featured. It is the third consecutive year the UK has featured in the top five². Tech captured more than a third of the total (£89.5 billion) investment into Europe in 2021, with £29.4 billion raised by start-ups and scale-ups³.

The UK is a hotbed of European AI, home to a third of Europe's AI start-up companies, twice as many as any other country. Over the last decade, the number of AI companies has increased by 600% to more than 1,300, with a collective turnover of almost £1.47 billion⁴. The Alan Turing Institute in London is the National Centre for AI and Data Science and has a partnership with 13 of the UK's most internationally recognised universities carrying out R&D in AI⁵.

Role of Industry 4.0

Recent years have seen the birth of what has become known as the fourth industrial revolution, or Industry 4.0 – using tech to completely transform traditional industrial processes.

An example is AgriTech where the UK ranks fourth in the world in attracting investment. Around 70% of land is dedicated to agriculture,

and tech is helping to transform farming. Farmers are integrating technologies such as robotics, sensors and data to make more informed decisions on cropped areas, animal husbandry and land management. One of AgriTech's fastest-growing areas, precision technology, is already widely used to improve the efficiency of farm operations, including targeted fertiliser and agrochemical applications.

Industry 4.0 is also revolutionising the financial services sector. The UK is the third largest destination for investment in FinTech services, accounting for 10% of global market share. There are over 1,600 firms in the sector, a figure that is expected to more than double by 2030⁶. Around 76,500 people work in FinTech, mainly in London, but also in dynamic regional hubs such as Edinburgh, Belfast, Leeds and Manchester⁷.

The UK's health technology (Healthtech) sector is also booming. Of the 3,000 Healthtech start-ups and scale-ups, 400 recorded 20% year-on-year growth over 2020 and 2021⁸. In 2020, venture capital investment into the sector reached a record high of £1.7 billion – third only to the US and China⁹.

During the Covid-19 pandemic, UK healthcare innovations came into their own, with apps that allow patients to video call doctors on demand, ask medical questions 24/7, order prescriptions from the nearest pharmacy to their door and monitor their vital signs through wearable devices. Other innovations have been designed to support the NHS in sourcing temporary medical staff.



Innovation and technology will continue to play a crucial role in the digital transformation across all industries.



Immersive tech and cybersecurity

There are more than 1,000 UK companies within the immersive industry (virtual and augmented reality – VR and AR) with highly skilled specialists working across different sectors and disciplines. It is forecast that there will be 400,000 immersive tech jobs and £66 billion added to the UK economy by 2030.

Both VR and AR are proving instrumental in medical innovations. One example is the Ventilator Challenge UK consortium which deployed AR to capture the crucial assembly steps needed to rapidly manufacture ventilator systems during the pandemic. Another industry example is aerospace, where VR is being used across the board from training through to design, manufacturing and in-flight entertainment.

Cybersecurity has been an increasing concern over recent years, and here also the UK is making its mark. With a more than 46,000 strong

workforce and over 1,400 established companies, it is Europe's largest and most concentrated cybersecurity market.

In 2021, the cyberspace sector received £2 billion in investment as part of the Government's National Cyber Security Strategy. There are now 19 universities certified as Academic Centres of Excellence in Cyber Security Research by the National Cyber Security Centre (NCSC), which also provides expert support to businesses¹⁰.

The increasing role of Industry 4.0

Innovation and technology will continue to play a crucial role in the digital transformation across all industries and will be critical in the UK's ambitions to be net zero in carbon emissions by 2050. In the meantime, technological innovation will be integral in shaping the most competitive businesses, both in embracing emerging opportunities and operating sustainably. ■

¹<https://www.great.gov.uk/technology>

²https://www.wipo.int/pressroom/en/articles/2021/article_0008.html

³<https://www.great.gov.uk/international/content/investment/sectors/technology/>

⁴<https://www.great.gov.uk/technology>

⁵<https://www.great.gov.uk/international/content/investment/sectors/technology/>

⁶<https://www.great.gov.uk/international/content/investment/sectors/technology/>

⁷<https://www.great.gov.uk/technology>

⁸<https://technation.io/uk-healthtech-hub/#uk-healthtech>

⁹<https://technation.io/uk-healthtech-hub/#uk-healthtech>

¹⁰<https://www.great.gov.uk/international/content/investment/sectors/technology/>

Energy: Powering ahead

The UK's energy sector is going through one of the most transformational changes in its history. This is being driven by three major trends: a national commitment to reduce greenhouse gas emissions by at least 78% by 2035, compared to 1990 levels¹; a move towards generating electricity closer to where it is consumed, rather than at larger centralised power stations; and a much greater focus on digitisation and data analysis to improve efficiency, sustainability and cost performance.

Zero carbon agenda

With its sixth Carbon Budget in 2021, the UK has set into law the world's most ambitious climate change target; one which would bring it more than three-quarters of the way to net zero by 2050² – and also enshrined in legislation.

The Government has provided more than £261 million in funding to develop the energy storage market. The country also has Europe's largest advanced materials research centre and is increasing funding in R&D across clean growth sectors.

Navigating its path to net zero is a 'Build Back Greener' initiative, backed by £12.2 billion of Government investment and potentially three times that from the private sector. It is estimated that up to 250,000 green jobs could be created.

Yet for now, oil & gas (O&G) remains a key component of the energy mix. While O&G investments are notoriously sensitive to price and market volatility, the value of potential capital development projects in the UK is estimated at almost £41 billion. The industry supports around 280,000 jobs, while 1,400 UK companies provide oilfield goods and services.

The UK Continental Shelf (UKCS) has yielded around 44 billion barrels of oil equivalent (boe) over the last 50 years and the Government is investing more than £14.7 million into new seismic surveys. It is estimated that up to 20 billion boe could be produced, both through new explorations and maximising brownfield recovery.

Renewables and nuclear powering forward

In the meantime, the UK continues to lead the way in renewable energy. It generates more electricity from offshore wind than any other country, with around 40% of global installed capacity³. In December 2020, the world's largest offshore wind farm was commissioned 120km off the coast at a value of £886 million.

The wind farm ambitions continue with a government promise to power every home with offshore wind energy within a decade⁴. Leading through to 2030, the Government has committed to investing £160 million in manufacturing the next generation of turbines,

including floating windmills which can deliver 1GW of energy – more than 15 times the current capacity of floating offshore volumes. Initial investments are also forecast to create around 2,000 construction jobs, and support up to 60,000 jobs directly and indirectly in factories, ports and across supply chains.

The Government has also identified nuclear power as a way of achieving its net zero targets. The country has used nuclear energy for more than 60 years. Today, nuclear power plants generate 21% of the UK's electricity, but around half of that capacity is to be retired by 2025⁵. The Nuclear Decommissioning Authority is responsible for the decommissioning and closing of the civil public sector nuclear legacy, with an annual budget of £2.3 billion.

The construction and operation of the nuclear new build programme, led by the Hinkley Point C nuclear power station, will produce 3.2GW of low-carbon electricity, create 25,000 job opportunities and 1,000 apprenticeships. A number of proposals have been put forward to build the country's new nuclear power facilities. They include the use of future technologies for lower-cost, safe power generation such as Small Modular Reactors (SMRs) which reduce capital expenditures, decrease construction times and provide power away from large grid systems. The new build programme will provide significant opportunities for investment.

Room for investment

The Government's Net Zero Strategy: Build Back Greener⁶, published in October 2021, outlines plans for a green economic recovery from the impact of Covid-19, with the UK at the forefront of the growing global green economy.

The strategy, and its '10 point plan for a green industrial revolution', include inter alia:

- Decarbonisation pathways to net zero by 2050, including illustrative scenarios
- Policies and proposals to reduce emissions for each sector
- Cross-cutting action to support the transition.

At the heart of this strategy are proposals to accelerate the rollout of low-cost renewable energy through the Government's flagship Contracts for Difference (CfD) competitive auction process⁷.

CfDs are seen as the primary method of supporting renewable energy, driving down the cost of technologies and playing an important role in leveraging £90 billion of private investment by 2030. The next round will open in March 2023 and will be the first in a series of annual auctions. So far, they have supported around 16GW of new low-carbon electricity capacity, including 13GW of offshore wind – enough to power over 15 million homes⁸. ■

¹<https://www.gov.uk/government/news/uk-enshrines-new-target-in-law-to-slash-emissions-by-78-by-2035>

²<https://www.gov.uk/government/news/uk-enshrines-new-target-in-law-to-slash-emissions-by-78-by-2035>

³Energy Investment Opportunities, Dept for International Trade, 2018

⁴2020 UK greenhouse gas emissions, provisional figures

⁵<https://www.world-nuclear.org/information-library/country-profiles/countries-t-z/united-kingdom.aspx>

⁶<https://www.gov.uk/government/publications/net-zero-strategy>

⁷<https://www.gov.uk/government/news/government-hits-accelerator-on-low-cost-renewable-power>

⁸<https://www.gov.uk/government/news/government-hits-accelerator-on-low-cost-renewable-power>

Healthcare:

A beacon for healthcare and life sciences

The UK healthcare system is predominantly government-funded. The National Health Service (NHS) is the world's largest integrated service of its kind. It has operated for more than 70 years, serves more than 65 million people and is the largest employer in Europe, as well as the world's highest employer of skilled professionals¹. NHS practitioners see 1.4 million patients every 24 hours and generate over 500 million patient days of data each year².

During Covid-19, although hugely overburdened by the pandemic, the NHS was able to roll out one of the world's most successful Coronavirus vaccination programmes, largely supported by a vaccine developed by the UK's University of Oxford, in partnership with pharmaceutical firm AstraZeneca.

Huge investment opportunities

The UK is a global hub for life sciences, second only to the US for inward investment and the European leader in finance. It is home to more than 5,600 life sciences companies, including all of the top

25 global pharmaceutical and the top 30 global medical technology companies, employing over 250,000 people³.

The Government's Life Sciences Vision⁴, published in July 2021, outlines the sector's ambitions over the next decade. It builds on previous years of joint government and industry partnerships to address some of the world's most significant healthcare challenges, including cancer, dementia and obesity.

Partnerships between universities and NHS organisations have created a platform for clinical research, with strategic public sector investment in specific growth areas, such as cell and gene therapy. Three of the world's top 10 universities for medicine⁵ and two of the top five for life sciences are in the UK⁶.

The Life Sciences Industrial Strategy⁷, updated in 2020, has already delivered billions of pounds of new funding in joint investment in areas such as advanced therapies, genomics, digital health and early diagnosis. Through designated Life Science Opportunity Zones

(LSOZ) across several locations, companies will be able to access research, higher education and business expertise, and capitalise on available lab space or land to build new facilities.

Medical technology is high on the agenda

Medical technology (MedTech) is perhaps the most thriving area in global healthcare and the UK is no exception. Its MedTech sector employment is ranked fourth in the world⁸, with more than 3,800 MedTech companies across an extended supply chain, many of them innovative small businesses.

The Government continues to support the MedTech industry's position at the forefront of digital innovation in medicines manufacturing. It is increasing its investment in digital infrastructure, 5G testbeds (performance testing), and in supporting companies to harness technologies such as the Internet of Things (IoT), AI, robotics, VR within therapy scenarios and 3D printing for prosthetics⁹.

Booming biotech

The UK has Europe's largest preclinical and clinical biomedical pipeline and one of the largest globally, with more than 500 new biotechnology based drugs and 600 pharmaceutical product candidates¹⁰. The main regulator, the Medicines and Healthcare products Regulatory Agency (MHRA), works with companies to develop new manufacturing processes and access global markets while maintaining high regulatory compliance across the industry.



More than 1,300 UK companies are involved in medicines manufacturing and the biopharmaceutical sector employs over 120,000 people across product developers, expert services and the supply chain¹¹.

The Government and industry have jointly formed the Medicines Manufacturing Industry Partnership (MMIP) to ensure the UK maintains its status as a world-class advanced centre for medicines manufacturing. The Government has also invested £150 million to create and expand research and innovation centres which specialise



The UK has set into law the world's most ambitious climate change target; one which would bring it more than three-quarters of the way to net zero by 2050.



in the manufacture of small molecules, vaccines, cell and gene therapies, and biologics (pharmaceutical products manufactured or extracted from biological sources).

At the forefront of R&D

In addition, the UK is at the forefront of global scientific exploration and invention. Over the years, UK based researchers and institutions have pioneered myriads of major scientific breakthroughs – from the discovery of penicillin and the structure of DNA to advancements in neuroscience and medical imaging, stem cells and IVF. The Government is committed to continuing this legacy and plans to increase medical R&D spending to 2.4% of GDP by 2027¹².

International companies currently sponsor the majority of UK commercial clinical trials for Advanced Therapy Medicinal Products (ATMPs) – relating to a rapidly growing category of complex treatments including gene and cell therapies. The UK also accounts for more than 12% of global clinical trials. The industry currently supports more than 3,000 jobs. By 2035, it is estimated the industry could be worth £10.3 billion and employ 18,000 people¹³.

Through its legacy of medical science, continued Government support and the continued role of the NHS, healthcare, scientific research and advances in MedTech are set to remain firmly on the agenda as a priority focus and a key investment opportunity. ■

¹NHS Long Term Plan, Chapter 4

²Choose UK Life Sciences, Dept for International Trade, 2020

³<https://www.great.gov.uk/international/content/investment/sectors/healthcare-and-life-sciences/>

⁴Life Sciences Vision, HM Government, July 2021

⁵<https://www.timeshighereducation.com/student/best-universities/best-universities-medicine>

⁶<https://www.topuniversities.com/university-rankings/university-subject-rankings/2021/life-sciences-medicine>

⁷<https://www.gov.uk/government/publications/life-sciences-industrial-strategy>

⁸https://directory-cms-public.s3.amazonaws.com/documents/Invest_in_UK_MedTech_factsheet_v2.pdf

⁹https://directory-cms-public.s3.amazonaws.com/documents/Invest_in_UK_Medicines_Manufacturing_v2.pdf

¹⁰Invest in UK Clinical Research, HM Government, 2020

¹¹Bring your medicines manufacturing to the UK, HM Government, 2020

¹²<https://www.great.gov.uk/international/content/investment/sectors/healthcare-and-life-sciences/>

¹³Advanced Therapies Factsheet, HM Government, July 2021

Education & Skills:

Building skills for the future

The UK has some of the world's most renowned higher education institutions. In 2021, 18 of its universities were placed in the top 100 QS World University Rankings, four of which were in the top 10 – Oxford and Cambridge, Imperial College London and University College London. The Government's ambition is to have 600,000 international higher education students studying in the UK by 2030¹.

Education technology (EdTech) is also expanding the possibility for students both at home and overseas, to study for university or college courses through remote online portals. The country is a leading provider of Transnational Education (TNE) programmes, where university courses can be accessed by overseas students – either online or through a network of 40 overseas UK campuses. Around 82% of universities currently offer TNE programmes. With over 1,000 EdTech companies, the UK is home to more than half of the European top 20 list, with exports worth an estimated £175 million to the economy².

Solid education structure

The UK's wide network of schools includes both state-funded and fee-charging private schools. For overseas students, there is also a considerable choice of boarding schools, which are fee-charging.

The main curriculum, known as the National Curriculum, is highly rated for gaining entry into both UK and overseas universities. Primary (lower years) and secondary (upper years) schools across all learning age groups are assessed and regulated, although there are some differences between England and the devolved governments of

Scotland, Wales and Northern Ireland. For example, school education standards in England are regulated by the Office for Standards in Education (Ofsted), and in Scotland by Education Scotland. There are also curriculum differences – in Wales, for example, the study of the Welsh language is compulsory in all state schools up to age 16.

Growing momentum towards EdTech

EdTech is increasingly helping children to learn at a pace that suits them and accounts for their individual needs. Schools spent more than £1 billion on digital learning between 2015-2020 and 70% of primary and secondary students use a tablet in lessons³.

The UK is becoming a global EdTech hotspot through mixed reality, immersive content and massive online open courses (MOOCs). It is number one in EdTech venture capital and angel funding in Europe and home to more than 1,000 companies, including 12 of Europe's top 20. With a reported 72% growth in 2020, the UK's industry is also among the fastest-growing in Europe, while £92 million was invested in emerging EdTech nationwide in 2020 – a 91% increase⁴.

The Covid-19 pandemic further accelerated the expansion of the sector in the UK. As in many countries, school and university students experienced severe interruptions to their face-to-face education for prolonged periods. Universities also faced huge disruption, with students often confined to their rooms. In the midst of these setbacks, classrooms needed to respond quickly and turn virtual, and EdTech innovation had to rapidly pick up the pace to meet the demands of online homeschooling.

Defining an EdTech strategy for future generations

In 2019, the Government announced its £10 million Education Technology Strategy to boost student outcomes and ensure those working in education were equipped with the necessary skills and tools to meet the needs of students in both schools and higher education establishments.

The Education Technology Strategy brings together teachers, lecturers and learning specialists with education technologists to imagine, prototype and implement ways to harness technology to tackle common challenges, such as:

- Reducing the time teachers spend preparing and marking homework assignments
- Boosting teacher training opportunities, and making training more accessible and tailored to individual teachers' needs
- Identifying how anti-cheating software can be improved
- Promoting the use of innovative technology to consider and help people with special educational needs and disabilities, and identifying the technology that best suits individual needs⁵.

Another initiative is the Raspberry Pi – a single board computer that teaches children how to code from an early age. The Raspberry Pi Foundation, a UK based charity, aims to make computing and the



digital world accessible to both adults and children in the UK and globally. It organises events and partners with youth organisations and schools to provide resources and develop learning opportunities in computer science⁶.

The education sector continues to grow through its school and tertiary education network, a growing base of EdTech companies, investments from both the Government and private sectors and a widening reach to international markets. After the challenges of Covid-19, the sector is stronger than ever and on its current trajectory is showing huge prospects for the future. ■

¹<https://www.great.gov.uk/education>

²<https://www.gov.uk/government/news/edtech-strategy-marks-new-era-for-schools>

³How education is going digital, Dept for International Trade, 2020

⁴<https://www.great.gov.uk/international/content/investment/sectors/edtech/>

⁵<https://www.gov.uk/government/news/edtech-strategy-marks-new-era-for-schools>

⁶<https://www.raspberrypi.org/about/>

Featured Contacts

Al-Ohaly & Partners, in association with DWF: www.alohallylaw.com

Asco Logistics: www.ascologistics.com

Banque Saudi Fransi: www.alfransi.com.sa

Castletown Law: www.castletownlaw.com

Clyde & Co: www.clydeco.com

Equiom, Saudi Arabia: www.equiomgroup.com

Federation of Saudi Chambers: fsc.org.sa

Invest Northern Ireland: www.investni.com

The Lincoln College Group: www.lincolncollege.ac.uk

pladis Food Manufacturing Company: www.pladisglobal.com

Populous: populous.com

Servcorp: www.servcorp.co.uk

Sovereign PRO Partner Group (PPG): www.sovereigngroup.com

Worley: www.worley.com

SABB: www.sabb.com

Saudi British Joint Business Council: www.sbjbc.org

Star-CaT Ltd: www.star-cat.co.uk

