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China-Saudi Arabia Relations Through the '1 + 2 + 3' Cooperation Pattern

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ABSTRACT

2020 marks the 30th anniversary of China-Saudi Arabia diplomatic relations, and over this time the relationship has evolved from one of marginal significance to a comprehensive strategic partnership. As China's role in the Middle East expands, the partnership with Saudi Arabia will increase in importance. This article analyses the bilateral relationship by using the '1 + 2 + 3' cooperation pattern as a framework. Introduced during the 2014 China-Arab States Cooperation Forum, this pattern articulates the cooperation priorities Beijing will focus on while engaging with Arab states: energy, trade and investment, infrastructure, nuclear energy, space satellite, and renewable energy. By analysing levels of China-Saudi cooperation through the '1 + 2 + 3' we can determine the relative success of the initiative, anticipate the near-term trajectory of the bilateral relationship, and develop a framework for measuring China's relations with other key states in the Middle East.

KEYWORDS

China; Saudi Arabia; Belt and Road Initiative; Saudi 'Vision 2030'; '1 + 2 + 3' cooperation pattern

Over the past 30 years the China-Saudi Arabia relationship has made significant strides. While the two countries were of marginal importance to each other prior to the establishment of diplomatic relations in 1990, they have since become important economic and diplomatic partners. During a 2016 state visit from President Xi Jinping, a comprehensive strategic partnership was announced, signalling a commitment to cooperate across a wide range of mutual interests, and a High Level Joint Committee (HJLC) was created to navigate the partnership.

Beyond the bilateral diplomatic mechanisms, the relationship fits into a wider regional initiative: China's '1 + 2 + 3' cooperation pattern. This was announced by Xi in his opening speech of the 2014 China-Arab States Cooperation Forum as a means of integrating Arab states into the Belt and Road Initiative (BRI).¹ Under this pattern each number represents a different cooperation priority. 1 represents energy, 2 infrastructure and trade and investment, and 3 nuclear energy, space satellite, and renewable energy. This pattern was re-emphasised in the 2016 *China Arab Policy Paper*, released

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¹J. Xi, 'Promote the Silk Road spirit, strengthen Sino-Arab cooperation', in J. Xi, *The Belt and Road Initiative* (Beijing: Foreign Language Press, 2019), pp. 42–53.

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to coincide with Xi's visit to Saudi Arabia.² Given this Chinese roadmap to stronger ties with Arab countries, the '1 + 2 + 3' cooperation pattern offers a useful framework to analyse the depth and breadth of particular countries' bilateral relationships with China. This paper presents a case study of Saudi Arabia's current level of engagement with China in each of the priorities targeted in the '1 + 2 + 3' cooperation pattern, indicating that in certain areas the partnership is quite mature while in others there have been significant efforts made to advance the relationship, especially by linking Saudi Arabia's own domestic development program, Saudi 'Vision 2030', with the BRI.³

1. Energy at the Core

The 1 in this equation puts energy at the core, which places the Gulf states at the centre of the '1 + 2 + 3' cooperation pattern. Gulf exporters generally account for approximately 40–50% of China's oil imports, making the region an important component of its energy security, and of these, Saudi Arabia is of particular significance, making this cooperation priority at an advanced level of development.⁴

Energy of course has been a major driver of China's tremendous economic growth, which in turn is one of the most important pillars of the Chinese Communist Party's legitimacy.⁵ While it was a net crude oil exporter until 1993, it has since become the world's largest importer.⁶ In 2019 it produced 4.9 million barrels per day (bpd), yet domestic consumption averaged 14.5 million bpd, making crude oil imports account especially important, averaging nearly 10 million bpd.⁷ It has been relatively successful in diversifying its crude oil sources, but collectively the Gulf exporters remain crucial.

Of these, Saudi Arabia has consistently been the top regional source of oil, and in recent years alternates with Russia as China's number one global oil partner. As a global oil superpower, this is not surprising. Saudi Arabia has the world's second largest proved reserves at 267 billion barrels, accounting for 16 percent of global oil.⁸ It produces on average 10.3 bpd, with the capacity to increase this by 2.2 million bpd.⁹ As a result, Saudi Arabia is the world's swing producer and has the ability to dramatically influence oil prices, an important consideration for China given its substantial reliance upon imports. This was reinforced during the 2020 oil war between Saudi and Russia after a collapse in OPEC + talks, when the kingdom increased its production from 9.7

²Ministry of Foreign Affairs of the People's Republic of China, 'China's Arab policy paper', (2016), available at: https://www.fmprc.gov.cn/mfa_eng/zxxx_662805/t1331683.shtml.

³On China-Saudi Arabian cooperation in the Belt and Road Initiative, see J. Fulton, 'Situating Saudi Arabia in China's Belt and Road Initiative', (2020), Asian Politics & Policy, <https://doi.org/10.1111/aspp.12549>.

⁴International Trade Center, 'China', continuously updated, available at: <https://www.intracen.org/country/china/>

⁵Y. Zhu, 'Performance legitimacy' and China's political adaptation strategy', *Journal of Chinese Political Science* 16(2), (2011), pp. 123–140.

⁶US Energy Information Administration, 'China surpassed the United States as the world's largest crude oil importer in 2017', (31 December, 2018), available at: <https://www.eia.gov/todayinenergy/detail.php?id=37821>.

⁷US Energy Information Administration, 'China's crude oil imports surpassed 10 million barrels per day in 2019', (23 March, 2020), available at: <https://www.eia.gov/todayinenergy/detail.php?id=43216>.

⁸Organization of Petroleum Exporting Countries, 'Saudi Arabia facts and figures', continuously updated, available at: https://www.opec.org/opec_web/en/about_us/169.htm.

⁹US Energy Information Administration, 'Saudi Arabia country analysis brief', (2017), available at: <https://www.eia.gov/international/analysis/country/SAU>.

Table 1. Value of Saudi Arabian fossil fuel exports to China.

Year	Value	Year	Value
2000	1.5	2010	25.9
2001	1.9	2011	39.5
2002	2.5	2012	44.9
2003	3.8	2013	43.4
2004	5.4	2014	37.9
2005	9.3	2015	21.3
2006	11.9	2016	16.4
2007	13.6	2017	21.5
2008	26.4	2018	31.3
2009	19.4		

Source: Chatham House Resource Trade. All figures billions of US\$.

to 12.3 million bpd, leading to a tremendous drop in oil prices.¹⁰ This complementarity between the world's largest consumer and producer of crude oil makes for an important dynamic in the relationship, and this was especially apparent after the United States pulled out of the Joint Comprehensive Plan of Action (JCPOA) and imposed sanctions against Iran in May 2018. At that point Iran had been supplying China with 7% of its oil imports.¹¹ Needing to find an alternative source to make up the loss, China turned to Saudi Arabia which nearly doubled its exports to China, from 921,881 bpd to 1,802,788 bpd between July 2018 and August 2019.¹² Despite the economic consequences of the coronavirus, Chinese crude oil imports from Saudi Arabia remained a robust 1.77 million bpd throughout the first quarter of 2020.¹³

This growth in energy trade has been especially strong over the past two decades. The value of Saudi fossil fuel exports to China was \$1.5 billion in 2000; by 2018 it had grown to \$31.3 billion.¹⁴ Beyond market logic, this can partially be attributed to a Strategic Oil Cooperation agreement signed during President Jiang Zemin's state visit in 1999, the first time a Chinese head of state had visited the kingdom. This agreement allowed Chinese companies to invest in Saudi Arabia's domestic oil market and Saudi firms to participate in China's downstream refining process.¹⁵ Since then the volume of crude oil trade has grown significantly, while the overall value has fluctuated with oil market instability, especially in the wake of the dramatic drop in price in 2014. In 2019, Saudi Arabia provided China with slightly more than 14% of its crude oil imports (Table 1).¹⁶

Despite this robust trade relationship, there has long been an awareness that the buyer-seller dynamic has limitations. For the Saudi government, the over-reliance on

¹⁰P. Inman, 'Saudis shed light on oil production increase that rattled markets', *The Guardian*, (10 March, 2020), available at: <https://www.theguardian.com/business/2020/mar/10/saudi-arabia-oil-production-increase-markets>.

¹¹Observatory of Economic Complexity, 'Iran', continuously updated, available at: <https://oec.world/en/profile/country/irn/>.

¹²N. Turak, 'Saudi Arabia is dramatically changing its oil exports to China and the US', *CNBC*, (15 August, 2019), available at: <https://www.cnbc.com/2019/08/15/saudi-arabia-dramatically-changing-its-oil-exports-to-china-and-the-us.html>.

¹³O. Zhou, 'China's March crude imports from top supplier Saudi Arabia down 1.6% on year', *S&P Global*, (28 April, 2020), available at: <https://www.spglobal.com/platts/en/market-insights/latest-news/oil/042720-china-data-mar-crude-imports-from-top-supplier-saudi-arabia-down-16-on-year>.

¹⁴Chatham House, continuously updated, available at: <https://resourcetrade.earth/>.

¹⁵J. Fulton, *China's Relations with the Gulf Monarchies* (London: Routledge, 2019), p. 102.

¹⁶ChinaMed, 'Saudi Arabia', continuously updated, available at: <https://www.chinamed.it/chinamed-data/middle-east/saudi-arabia>.

Table 2. Top five Saudi Arabian export markets by percentage, 2018.

Country	Percentage of exports (%)
China	14.3
Japan	11.2
India	10
South Korea	8.94
United States of America	8.38

Source: Organisation of Economic Complexity.

crude exports has long been a structural weakness in its economy. The petroleum sector provides Saudi Arabia with 87% of budget revenues, 42% of gross domestic product, and 90% of export earnings.¹⁷ The national budget is set with a break-even price of \$83 per barrel.¹⁸ The drop in prices since 2014, from \$115 in June of that year to an expected average of \$41 throughout 2020,¹⁹ has resulted in a tremendous drop in revenues for Saudi Arabia, and it has subsequently had to recalibrate, issuing bonds to fund debt, selling 1.5% of Saudi Aramco in an IPO, and increasing taxes.²⁰ The Chinese market is therefore incredibly important to the Saudi economy and building market share is a core interest (see Table 2). China's focus remains the need to lock in supply. For the time being this works for both countries, but in a world planning for a post-hydrocarbon future, this is a major long-term vulnerability for Saudi Arabia. If its relationship with China is to expand, this energy relationship needs to diversify. There are already signs that this is underway. The CEO of Saudi Aramco, Amin H. Nasser, has articulated a China strategy that moves 'beyond a buyer-seller relationship to one where we can make significant investments to contribute to China's economic growth and development'.²¹ With recent announcements of investments into China's downstream sector, including refineries in Zhoushan and Liaoning, this may be an indication of the trajectory of the energy relationship.²²

2. The Two Wings

The 'Two Wings' of trade and investment and infrastructure are also at a relatively advanced stage with Saudi Arabia. As would be expected given the importance of oil trade in the bilateral relationship, this component of the cooperation pattern has seen

¹⁷CIA World Factbook, 'Saudi Arabia', continuously updated, available at: <https://www.cia.gov/library/publications/the-world-factbook/geos/sa.html>.

¹⁸'Why Saudi Arabia's Opec allies will be worst hit by oil crash', Financial Times, (11 March, 2020), available at: <https://www.ft.com/content/85bc7cc4-62d8-11ea-a6cd-df28cc3c6a68>.

¹⁹US Energy Information Administration, 'Short-term energy outlook', (7 June, 2020), available at: <https://www.eia.gov/outlooks/steo/report/prices.php>.

²⁰D. Barbuscia, 'Saudi Arabia raises \$5 bln as bond investors brush off Gulf jitters', Reuters, (21 January, 2020), available at: <https://www.reuters.com/article/saudi-bonds/update-3-saudi-arabia-raises-5-bln-as-bond-investors-brush-off-gulf-jitters-idUSL8N29Q0GV>; K. Kelly and S. Reed, 'Saudi Aramco to raise \$25.6 billion in biggest I.P.O. ever', New York Times, (5 December, 2019), available at: <https://www.nytimes.com/2019/12/05/business/energy-environment/saudi-aramco-ipo.html>; M. Amlôt, 'Saudi. Arabia VAT tax triples to 15 pct on July 1', Al Arabiya, (29 June, 2020), available at: <https://english.alarabiya.net/en/features/2020/06/29/Saudi-Arabia-VAT-triples-to-15-percent-on-July-1-Here-s-everything-you-need-to-know>.

²¹S. Westall, 'Saudi Aramco agrees tie-up for \$10 bln project in China', Reuters, (22 February 2019), available at: <https://www.reuters.com/article/asia-saudi-china-aramco-idUSL5N20H24B>.

²²R. El Gamal, A. Chen, and M. Zhang, 'Saudi Aramco shifts strategy in China to boost oil sales', Reuters, (14 March, 2019), available at: <https://af.reuters.com/article/commoditiesNews/idAFL5N20R1A8>.

Table 3. Value of China – Saudi Trade, 2005–2019.

Year	Value of Chinese imports	Value of Chinese exports	Total trade value
2005	12,286.44	3824.84	16,111.28
2006	15,086.48	5054.43	20,140.91
2007	31,636.52	8785.24	40,211.76
2008	52,557.46	12,414.05	64,971.51
2009	28,942.28	10,690.18	39,632.46
2010	38,861.49	12,336.69	51,198.18
2011	57,494.85	17,134.23	74,629.08
2012	64,777.97	19,635.04	84,413.01
2013	61,751.92	20,807.22	82,559.14
2014	57,308.4	23,078.15	80,386.55
2015	33,194.94	24,639.44	57,834.38
2016	27,214.93	20,082.36	47,297.29
2017	25,827.13	19,723.47	45,550.6
2018	38,386.31	21,048.56	59,434.88
2019	47,588.33	25,261.89	72,850.22

Source: International Monetary Fund, Direct of Trade by Country Statistics. All figures billions of US dollars.

significant growth. Trade reached \$73 billion in 2019, up from a modest \$419 million in 1990 when diplomatic relations were established.²³ China has been Saudi Arabia's top overall trade partner every year since 2014 and Saudi Arabia is consistently China's top Middle Eastern trading partner.²⁴

A mechanism that would potentially strengthen the trade relationship is the long-negotiated China-GCC free trade agreement (FTA). First discussed in 2004 under the umbrella of an Economy, Trade, Investment, and Technology Cooperation Framework Agreement, the FTA negotiations have been characterised by bursts of activity followed by long periods of dormancy.²⁵ During Xi's 2016 state visit the FTA was given new momentum, followed by four rounds of talks that year.²⁶ However, the ongoing dispute between Saudi Arabia, the UAE, Bahrain, and Egypt and Qatar make negotiating a multilateral agreement through the GCC impossible until there is a resolution. If and when it is signed it would essentially provide each individual GCC country with the same FTA with China, providing Saudi Arabia with an instrument to build stronger trade ties with China.

The volume of trade between China and Saudi Arabia is impressive, but a closer look at the data reveals a more complex relationship than the numbers alone suggest. The nature of the trade is such that it is consistently weighted in Saudi Arabia's favour, with a nearly \$20 billion imbalance in 2019 alone (see Table 3). At the same time, there is reason for possible concern in Riyadh. Chinese exports to Saudi Arabia include industrial and construction equipment and services, consumer goods, textiles, electronics, and food. Saudi Arabia's exports to China are massively dominated by energy; Chatham House's Resource Trade data has fossil fuels accounting for 97% of Saudi

²³M. bin Huwaidin, *China's Relations with Arabia and the Gulf, 1949-1999* (London: Routledge, 2003), p. 234; International Monetary Fund, 'Direction of trade statistics', continuously updated, available at: <https://data.imf.org/?sk=9D6028D4-F14A-464C-A2F2-59B2CD424B85&sid=1514498277103>.

²⁴International Monetary Fund, 'Direction of trade statistics'.

²⁵X. Qian and J. Fulton, 'China-Gulf economic relationship under the 'Belt and Road' Initiative', *Asian Journal of Middle Eastern and Islamic Studies* 11(3), (2017), pp. 16–17.

²⁶L. Ding, 'President Xi Jinping's visit to open a new era of Middle East cooperation with China, and China-GCC FTA negotiations will speed up', *China Industry and Economy News*, January 23, 2016.

exports to China in 2018.²⁷ As discussed above, this over-reliance on energy remains a structural disadvantage for Saudi Arabia.

In terms of investment, there has also been considerable momentum. According to data from the American Enterprise Institute's *China Global Investment Tracker*, China has made nearly \$6 billion worth of investments in the kingdom since 2005, and the ChinaMed dataset has approximately \$2.6 billion worth of Chinese foreign direct investment stock in Saudi Arabia in 2018.²⁸

An initiative that is under negotiation and may intensify this element of the relationship is a proposed joint investment fund (JIF). A memorandum of understanding (MoU) was signed during the 2017 HLJC meetings in Riyadh to develop a \$20 billion JIF, involving the Saudi Industrial Development Fund, China's Silk Road Fund and Everbright.²⁹ This follows the model established with the UAE and Qatar, both of which have developed similar, albeit smaller funds with Chinese entities.³⁰ That these have both progressed from MoU to activation suggests the China-Saudi JIF has a likelihood of being activated as well, and the expectation is that it will be used to develop projects linked to the BRI and Saudi Vision 2030.

The second wing, infrastructure development, is one where China and Saudi Arabia can build on a strong record of cooperation. This started with a 2007 MoU allowing Chinese firms to tender for contracts directly rather than act as subcontractors, and led to a dramatic expansion of Chinese contracting in the kingdom, a period that coincided with a period of historically high oil prices and therefore a greater willingness to build in the kingdom.³¹ The *China Global Investment Tracker* puts the value of Chinese construction contracts in Saudi Arabia at over \$35 billion between 2005 and 2019, with all but \$1.1 billion of that coming after 2007. Among the projects have been some high-profile ones, such as the China Railway Construction Corporation's participation in building the Mecca-Medina-Jeddah railway to transport pilgrims during *haji*, Power Corporation of China's construction of the Middle East's largest power plant north of Jeddah, and the joint Aramco-Sinopec construction of the Yanbu refinery.³² These early successes were perceived as 'clear evidence of the high trust in Chinese companies in terms of technology and their capability' and led to a greater role in infrastructure construction projects across the country.³³

With the introduction of the BRI and the Saudi Vision 2030 this has been an especially active feature of the relationship, especially since there is considerable synergy between the two countries' programs. Saudi Vision 2030, designed to create a more sustainable and diversified economy, is projected to create six million new jobs, and

²⁷Chatham House, continuously updated, available at: <https://resourcetrade.earth/>.

²⁸American Enterprise Institute, *China Global Investment Tracker*, continuously updated, available at: <https://www.aei.org/china-global-investment-tracker/>; ChinaMed, 'Saudi Arabia'.

²⁹'Everbright bank in talks to back \$20 billion Saudi fund', (26 February, 2019), available at: <https://www.bloomberg.com/news/articles/2019-02-26/everbright-bank-is-said-in-talks-to-back-20-billion-saudi-fund>.

³⁰J. Fulton, 'China-UAE Relations in the Belt and Road Era', *Journal of Arabian Studies* 9(2), (2019), pp. 260–261; J. Fulton, 'Chinese economic statecraft and the Gulf Cooperation Council', in Y. Wang and W. Liang, eds. *Challenges to China's Economic Statecraft: A Global Perspective* (Lanham: Lexington Books, 2019), p. 120.

³¹Fulton, *China's Relations*, p. 102.

³²Fulton, *China's Relations*, pp. 102–103.

³³A. Hanan Tago, 'China eager to strengthen Saudi ties, says envoy', *Arab News*, (30 October, 2012), available at: <http://www.arabnews.com/china-eager-strengthen-saudi-ties-says-envoy>.

has the optimistically ambitious goal of doubling the kingdom's gross domestic product by 2030.³⁴ This would require a significant injection of private and foreign investment into the non-oil economy, with a target of \$4 trillion.³⁵ The Vision document specifies eight sectors to develop: mining and metals, petrochemicals, manufacturing, retail and wholesale trade, tourism and hospitality, health care, finance, and construction.³⁶ Chinese firms see opportunities to build upon their established presence in infrastructure construction, and Saudi leaders, especially Crown Prince Mohammed bin Salman, have frequently linked Saudi Vision 2030 with the BRI. After the comprehensive strategic partnership was announced, the Crown Prince referred to the BRI as 'one of the main pillars of the Saudi Vision 2030 which would seek to make China among the Kingdom's biggest economic partners.'³⁷ That he is the Saudi representative on the HLJC, co-chairing with Vice Premier Han Zheng, is further evidence that the two governments are serious about developing this aspect of the relationship.

While China's role is undefined for the time being, Saudi's Neom megacity project is one area where the BRI-Vision synergy is expected to lead to deeper cooperation. Neom, a city being built on the northwest Red Sea coastline, has been described as 'the world's most ambitious project,'³⁸ a \$500 billion smart city that is the most high-profile feature of Saudi Vision 2030. The construction of this city would offer substantial opportunities for infrastructure contracting, and Chinese firms can draw upon years of successful operations in the kingdom in their pursuit of Neom contracts.

More tangible is the development in the Jizan City for Primary and Downstream Industries (JCPDI). In 2016 a group of Saudi and Chinese entities established a joint venture company, Saudi Silk Road Industrial Services, to draw Chinese investment and industrial services in the Chinese Industrial Park within the JCPDI.³⁹ The first major Chinese project in JCPDI is a \$3.8 billion petrochemicals plant being built by Pan-Asia PET Resin Co, a Guangzhou company.⁴⁰ The significance of the Chinese development in JCPDI became apparent in 2018 with the announcement of the 'industrial park-port interconnection, two-wheel and two-wing approach', a transnational initiative to link Chinese commercial projects from the Gulf to the Arabian, Red, and Mediterranean Seas.⁴¹ This places JCPDI within a framework that connects Chinese interests in

³⁴McKinsey Global Institute, 'Saudi Arabia beyond oil: the investment and productivity transformation', (December 2015), available at: https://www.mckinsey.com/~/_/media/McKinsey/Featured%20Insights/Employment%20and%20Growth/Moving%20Saudi%20Arabias%20economy%20beyond%20oil/MGI%20Saudi%20Arabia_Executive%20summary_December%202015.ashx.

³⁵S. Grand and K. Wolff, 'Assessing Saudi Vision 2030: a 2020 review', Atlantic Council, (June 2020), available at: <https://www.atlanticcouncil.org/in-depth-research-reports/report/assessing-saudi-vision-2030-a-2020-review/>.

³⁶McKinsey Global Institute, 'Saudi Arabia beyond oil'.

³⁷'Fusing Vision 2030 with Belt Road Initiative', Arab News, (3 September, 2016) available at: <http://www.arabnews.com/node/979346/saudi-arabia>.

³⁸K. Young, 'Saudi Arabia's Neom: State-led growth meets new global capitalism', Arab Gulf States Institute in Washington, (26 October, 2017) available at: <https://agsiw.org/saudi-arabias-neom-state-led-growth-meets-new-global-capitalism/>.

³⁹D. Chen and W. Han, 'Deepening cooperation between Saudi Arabia and China', King Abdullah Petroleum Studies and Research Center, March 2019, p. 24.

⁴⁰W. Li, 'Pan-Asia's Saudi project to break ground next March', China Daily, (27 June, 2017) available at: https://www.chinadaily.com.cn/business/2017-06/27/content_29896950.htm.

⁴¹Embassy of the People's Republic of China in the Republic of Malta 'Wang Yi: China and Arab states should jointly forge the cooperation layout featuring "industrial park-port interconnection, two-wheel and two-wing approach"', (10 July, 2018), available at: <http://mt.chineseembassy.org/eng/zyxwdt/t1576567.htm>.

strategic points around the Arabian Peninsula.⁴² Other industrial parks and ports within this initiative have been the recipients of substantial Chinese investment in recent years, indicating that the park in Jizan will also see a similar investment and construction.⁴³

3. The Three Breakthroughs

The three breakthroughs are nuclear energy, space satellite, and new energy, and for each of these there are nascent levels of development with Saudi Arabia but substantial opportunity for growth, especially as these feature significantly in the Saudi 'Vision 2030' program.

In terms of nuclear energy, Saudi Arabia has long been considering it as a means of reducing its domestic consumption of oil. China's ambitions for a larger role in Middle Eastern nuclear energy fits neatly with the Saudi government's need for domestic energy consumption, and the two countries have been exploring ways to increase cooperation in this realm since 2012 when they signed an MoU to cooperate on civilian use of nuclear energy. During the 2017 HLJC meeting several other MoUs were signed, including one to explore and assess uranium and thorium resources, and one to develop gas-cooled nuclear reactors for water desalination projects.⁴⁴ Also in 2017, the president of King Abdullah City for Atomic and Renewable Energy, Hashim Yamani, visited China to discuss a pre-feasibility study to build Saudi Arabia's first two nuclear reactors, which are slated to be commissioned in 2027.⁴⁵ Firms from five other countries – the United States, South Korea, France, and Russia - have also submitted a bid. The US has been aggressive in trying to win the contracts, but there are political considerations; Congress can reject any proposed international nuclear agreement and they have concerns about Saudi Arabia's plans for the domestic production of nuclear fuel, which could be used for a nuclear weapons project. During a 2018 interview with a US news program the Crown Prince said that if Iran "developed a nuclear bomb, we will follow suit as soon as possible," adding to US concerns about proliferation in the Gulf.⁴⁶ As a result, the political pressures in Washington will likely feature in Riyadh's decision about the reactor bid. Notably, Chinese state-owned nuclear energy companies do not face the same types of political constraints and Beijing has goal of becoming a major producer of nuclear power and technology. Since the political and

⁴²J. Fulton, 'China's Gulf investments reveal regional strategy', Arab Gulf States Institute in Washington, (29 July, 2019), available at: <https://agsiw.org/chinas-gulf-investments-reveal-regional-strategy/>.

⁴³The other industrial parks are Khalifa Industrial Zone Abu Dhabi (UAE), China-Oman Industrial Park (Oman), and Egyptian-Chinese Industrial Zone in Ain Sokhna (Egypt). See J. Fulton, 'Domestic politics as fuel for China's Maritime Silk Road Initiative: The case of the Gulf monarchies', *Journal of Contemporary China* 29 (122), (2020).

⁴⁴Reuters, 'Saudi Arabia signs cooperation deals with China on nuclear energy', (25 August 25, 2017), available at: <https://www.reuters.com/article/saudi-china-nuclear/saudi-arabia-signs-cooperation-deals-with-china-on-nuclear-energy-idUSL8N1LB1CE>.

⁴⁵M. Habboush, 'Saudi Arabia is getting ready for its first nuclear-power deals', Bloomberg, (15 January, 2018), available at: <https://www.bloomberg.com/news/articles/2018-01-15/saudi-arabia-seen-awarding-nuclear-reactor-contracts-in-december>.

⁴⁶D. Sanger and W. Broad, 'Saudis want a US nuclear deal. Can they be trusted not to build a bomb?' *New York Times*, (22 November, 2018), available at: <https://www.nytimes.com/2018/11/22/world/middleeast/saudi-arabia-nuclear.html>.

commercial ambitions align, China might have a competitive edge in strengthening its nuclear cooperation with Saudi Arabia.

In terms of the second breakthrough, space satellites, this has expanded tremendously since it was first articulated in 2014. One major cooperative endeavour is the China-Saudi Lunar Exploration Cooperation Memorandum, signed in 2017 to develop cooperation in space exploration. An early example of this in action is the Chang'e-4 mission to land a Chinese rover on the far side of the moon. An early phase of the project was the launch of a lunar communications relay satellite in May 2018, and it featured a Saudi-developed optical camera, as per an agreement between the King Abdul-Aziz City of Science and Technology and the China National Space Administration.⁴⁷

This feature of the '1 + 2 + 3' cooperation pattern has become especially important as the Digital Silk Road (DSR) has become a larger feature of China's BRI goals. The DSR was announced in 2015 with the goal of enhancing international digital connectivity and putting China at the centre of global technological standard and norm-setting. A large part of this is building physical digital infrastructure, with data centres, 5G networks, and fibre-optic cables. At the same time, President Xi's opening speech at the 2017 Belt and Road Forum expressed a more ambitious vision for the DSR:

We should pursue innovation-driven development and intensify cooperation in frontier areas such as digital economy, artificial intelligence, nanotechnology, and quantum computing, and advance the development of big data, cloud computing, and smart cities so as to turn them into a digital Silk Road of the twenty-first century.⁴⁸

For Saudi Arabia, the need to build knowledge-based economies is central to Saudi Vision 2030, and Chinese firms have been making inroads with projects that link Saudi priorities with the DSR. In 2017 Saudi Minister of Communications and Information Technology Mohammed Al Suwaiyel attended the 4th World Internet Conference in Wuzhen and signed an MoU to cooperate with China on a range of ICT applications, including satellite services, electronic security, digital content, cloud computing, human resource development and training, and broadband network development.⁴⁹ Another notable MoU was signed by the Saudi Ministry of Defence to cooperate with the Equipment Development Commission of China on the military use of the Beidou Navigation Satellite System.⁵⁰

Huawei has also been a big part of the DSR story in Saudi Arabia, with MoUs signed with a range of Saudi partners. Saudi Telecom Company signed an 'Aspiration Project' contract for wireless network modernisation and 5G network construction.⁵¹

⁴⁷'China launches unprecedented moon mission with Saudi technology', Al Arabiya, (21 May, 2018), available at: <https://english.alarabiya.net/en/News/gulf/2018/05/21/China-launches-moon-mission-with-Saudi-optical-camera-technology.html>.

⁴⁸H. Yong, 'Construction of Digital Silk Road lights Up BRI cooperation', People's Daily, (24 April, 2019), available at: <http://en.people.cn/n3/2019/0424/c90000-9571418.html>.

⁴⁹Ministry of Communications and Information Technology, 'Executive program to create Digital Silk Road between China and Saudi Arabia', (11 December, 2017), available at: <https://www.mcit.gov.sa/en/media-center/news/89588>.

⁵⁰RWR Advisory Group, 'Saudi Arabia agrees to cooperate in the military use of China's Beidou navigation satellite system', (11 July, 2019), available at: <https://www.rwradvisory.com/saudi-arabia-agrees-to-cooperate-in-the-military-use-of-chinas-beidou-navigation-satellite-system/>.

⁵¹J. Calabrese, 'The Huawei wars and the 5G revolution in the Gulf', (30 July 2019), available at: <https://www.mei.edu/publications/huawei-wars-and-5g-revolution-gulf>.

During a March 2019 Saudi-China Investment Forum Huawei signed five MoUs with Saudi ministries and companies, focussing on the buzz word of the day, 'smart': smart cities, smart campus, smart logistics, smart education, smart traffic, smart grid, smart security, and smart roads. It also signed an MoU with ACWA Power for the use of AI and big data.⁵² Since then ACWA has partnered with China's Silk Road Fund, which recently finalised purchase of a 49% stake in the company.⁵³ Huawei 5G partnership with Saudi Telecom in the field of smart city management has already been implemented, with the creation of a unified security operations centre in Mecca in 2015 to support the Saudi government during *hajj*, when it receives a dramatic spike in emergency calls. This project is seen as a model for other Saudi emergency call centres.⁵⁴

As for renewable energy, Saudi Vision 2030 also emphasises this, making yet another sector where the two countries' agendas are complementary. The 2030 blueprint notes that 'the kingdom's impressive natural potential for solar and wind power generation remains largely untapped.'⁵⁵ Since China is attempting to position itself as a global leader in renewables, this will also likely drive the relationship forward. The ACWA-Silk Road Fund partnership is evidence of this; these two entities worked together on Dubai's Mohammed bin Rashid Al Maktoum Solar Park, the world's largest solar plant. Their recent partnership is planned to support 'ambitious growth planned in the renewables sector in MENA, Africa, Asia, and Central Asia.'⁵⁶ In terms of renewable energy projects within Saudi, PIF signed an MoU with China's National Energy Administration during the 2019 HLJC meeting in Beijing, with the aim of developing manufacturing, power generation and emerging technologies in the kingdom's renewable energy sector.⁵⁷ Headway has already been made, with China's LONGi planning a \$2 billion solar panel production plant in Saudi Arabia.⁵⁸

4. Conclusion

Given Saudi Arabia's status as the largest Arab economy, a global energy superpower, and the custodian of Islam's holiest sites, it is no surprise that China perceives the kingdom to be an important Middle East partner, and that each of the '1 + 2 + 3' cooperation priorities are at advanced or developing stages. Energy, trade, investment and infrastructure are all well-established features of the bilateral relationship, and the

⁵²Telecom Review, 'Huawei signs 5 MoUs with Saudi ministries to develop ICT infrastructure', (20 March, 2019), available at: <https://www.telecomreview.com/index.php/articles/telecom-vendors/2936-huawei-signs-5-mous-with-saudi-ministries-to-develop-ict-infrastructure>.

⁵³ACWA Power, Silk Road Fund complete partnership', Arab News, (11 May, 2020), available at: <https://www.arabnews.com/node/1672921/corporate-news>.

⁵⁴Huawei, 'Huawei helps the Ministry of Interior of the Kingdom of Saudi Arabia policy the Hajj', available at: <https://e.huawei.com/se/case-studies/industries/2019/saudi-arabia-collaborative-dispatching>.

⁵⁵Saudi Vision 2030, 'Investing for the future', available at: <https://vision2030.gov.sa/en/node/384>.

⁵⁶WAM Emirates News Agency, 'DEWA ACWA Power, Silk Road Fund reach financial closing on 950mw 4th phase of Mohammed bin Rashid Al Maktoum Solar Park', (24 March, 2019), available at: <http://wam.ae/en/details/1395302750477>.

⁵⁷'Saudi Arabia's PIF signs MoU with China on renewable energy cooperation', Al Arabiya, (22 February, 2019), available at: <https://english.alarabiya.net/en/business/energy/2019/02/22/Saudi-Arabia-s-PIF-signs-MoU-with-China-on-renewable-energy-cooperation>.

⁵⁸'Saudi Arabia plans \$2 billion solar and carbon black complex: official', Reuters, (14 January, 2019), available at: <https://www.reuters.com/article/us-saudi-solar/saudi-arabia-plans-2-billion-solar-and-carbon-black-complex-official-idUSKCN1P80QB>.

'three breakthroughs' have significant potential to do so as well, especially since they align closely with Saudi 'Vision 2030' priorities. Going forward, DSR-based projects appear to have significant momentum and as Saudi leadership continues to focus on the need to develop a knowledge-based economy it is likely that digital cooperation will become a larger feature of the bilateral relationship.

That is not to say there are not limitations in the relationship, the most significant being tensions between China and the United States, Saudi Arabia's most important ally. Previous US administrations chided Beijing for what they perceived as Chinese free-riding in the Gulf region, complaining that it should contribute more to the security of a region that has become increasingly important to its interests.⁵⁹ Under the Trump administration the tone has changed dramatically, with warnings to Middle East leaders that they should end cooperation with China on issues that could be perceived as creating a security risk for the US.⁶⁰ This message has been consistent throughout the Trump presidency, with repeated warnings from Secretary of State Mike Pompeo and former National Security Advisor John Bolton about the risks of cooperation with China, especially concerning 5G networks.⁶¹ In May 2020 this came to a more acute level of tension, with a US official stating a preference for 'reduction of entanglements overall. Elimination in critical areas altogether ... this is not exclusive to Israel. We're having similar conversations with all of our allies and partners.'⁶² If Washington pursues this binary logic with Saudi Arabia it could force difficult choices that could impact the trajectory of Sino-Saudi relations. Specifically, cooperation in two of the 'three breakthroughs' - nuclear energy and DSR-related projects - would be heavily scrutinised. This came into sharper focus in the summer of 2020 when the *Wall Street Journal* published a story that China has reportedly helped Saudi Arabia build a plant to process uranium ore.⁶³ This type of enriched uranium can be used in power plants as well as nuclear weapons, and the concern in Washington is that China could be supporting the Saudis to develop a nuclear weapons program. Whether or not this is the case, the perception of it could provoke a strong reaction from the US, which could use its considerable leverage to pressure the Saudis for reduced engagement with China on the nuclear portfolio. This offers an important reminder: the US is an ever-present if not always visible third actor in the China-Saudi bilateral relationship and managing the tensions and expectations inherent to this is always a major consideration.⁶⁴

For the time being, however, expect projects that fit under the '1 + 2 + 3' cooperation pattern to play an important role in developing the relationship. The wide range

⁵⁹'The Obama interview: China as a free rider', *New York Times*, (8 August, 2014), available at: <https://www.nytimes.com/video/opinion/10000003047788/china-as-a-free-rider.html>

⁶⁰L. Harkov, 'US asking Israel to eliminate China ties in sensitive areas', *Jerusalem Post*, (20 May, 2020), available at: <https://www.jpost.com/israel-news/israel-requested-indemnity-after-us-requested-cuts-on-trade-with-china-628530>.

⁶¹J. Fulton, 'China's changing role in the Middle East', *Atlantic Council*, (June 2020), pp. 16–17.

⁶²Harkov, 'US asking Israel'.

⁶³W. Strobel, M. Gordon and F. Schwartz, 'Saudi Arabia, with China's help, expands its nuclear program', *Wall Street Journal*, (4 August, 2020), available at: <https://www.wsj.com/articles/saudi-arabia-with-chinas-help-expands-its-nuclear-program-11596575671#:~:text=WASHINGTON%E2%80%94Saudi%20Arabia%20has%20constructed,with%20knowledge%20of%20the%20site>.

⁶⁴For a deeper look at the China-US-Saudi triangle, see J. Fulton, 'Strangers to strategic partners: thirty years of Sino-Saudi relations', *Atlantic Council*, (August 2020), available at: <https://www.atlanticcouncil.org/in-depth-research-reports/report/strangers-to-strategic-partners-thirty-years-of-sino-saudi-relations/>.

of mutual interests being met indicate that the two countries will continue to work together. China's presence in the Middle East will only continue to grow, making Saudi Arabia a key partnership to cultivate. The economic realities of the global energy market will continue to make trade with Asia an imperative for Saudi Arabia, and China's market size makes it a natural long-term relationship. Finally, that the BRI and Saudi 'Vision 2030' are highly complementary is yet another indicator that their cooperation will take a more structured approach, using their comprehensive strategic partnership to coordinate projects that drive the relationship forward.

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