

RESEARCH ARTICLE

Sino-Arab Free Trade Agreements, AI Diplomacy, and the Realisation of AI and Sustainability Goals in the Middle East

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Abstract

Sino-Arab Free Trade Agreements (FTAs) have remained elusive over two decades of increasing economic relations and trade negotiations. Nevertheless, substantial investments and trade demonstrate the Arab region's strategic importance to China. Recent strategic drivers of China's engagement with the Middle East have evolved from an original energy security focus, to more recently integrating technological investments into partnerships, such as artificial intelligence and renewable energy infrastructure—complicating progress towards an FTA. Such measures can help progress achievement of the Sustainable Development Goals and offer economic development opportunities, but negotiations may be hindered by concerns ranging from technological dependency to trade competition. Examining opportunities and challenges in the developing China–Arab relations, the article explores legal and policy obstacles and opportunities towards securing an FTA. With a focus on recent developments in AI and sustainability partnerships, the article analyses legal strategies and international law best practices for a model FTA for Arab countries.

Keywords: Free Trade Agreements (FTAs); AI Diplomacy; Digital Silk Road; MENA; Belt and Road Initiative (BRI); Sustainability

1. Introduction

1.1 Research objectives

State-led Chinese trade and investment in Middle Eastern and North African (MENA) countries has, in recent decades, strategically focused on enhancing energy security, expanding trade and investments, and increasing geopolitical influence. More recently, the global race for AI supremacy has strengthened focus of Chinese trade and investment efforts upon technological innovation and capacity-building, particularly with Gulf Cooperation Council (GCC, 2022) nations. Negotiations and cooperation mechanisms towards a comprehensive China–GCC FTA, which may serve as a blueprint for the wider MENA region, have been ongoing since 2004, but its completion nonetheless remains elusive.

Over the lengthy negotiation periods exceeding two decades, the sectors of cooperation that were central to the talks initially have evolved, resulting in a game of “cat-and-mouse,” adding complexity to trade negotiations. Changing economic, technological, and geopolitical landscapes, including Gulf states' own industrial, technological, and

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sustainability ambitions, have led to challenges and opportunities that have complicated and delayed efforts to deliver an FTA (Cornwell, 2024). The strategic focus on traditional sectors like energy and infrastructure has not diminished, but rather there are expanded and emerging areas of strategic importance to negotiate, such as artificial intelligence, digital trade, and sustainability—both economic and environmental, such as renewable energies.

Such emphasis on technological advancements is fundamental for economic development, innovation, capacity-building, and climate targets—critical components of the United Nations Sustainable Development Goals (SDGs) (UN Department of Economic and Social Affairs, no date). AI and digital trade can boost economic growth in a time of fierce global competition and opportunity, while clean energy capacity development can be beneficial towards achievement of climate goals. Traditionally, FTAs have focused more narrowly on mutually beneficial trade provisions, but international best practices demonstrate that they also offer opportunities to incorporate non-trade provisions, such as environmental protection clauses that support wider climate and sustainability commitments, as well as technological capacity-building. However, this article argues that it is unlikely for such non-trade provisions, particularly those related to environmental sustainability and the SDGs, to be included in any eventual China–GCC FTA. Instead, such issues are more likely to be addressed in separate agreements. Rather, the article argues that any Sino-Arab FTAs will be more likely to strengthen provisions on technological investments and digital trade. This reflects both the strategic importance of AI and digital trade in the economic agendas of both regions, and the reality of recent enhanced collaborations in this field between China and Arab countries. In doing so, the article explores historical patterns in Sino-Arab trade negotiations, and examines Arab concerns of technological dependency on China that may hinder progress towards completion of a comprehensive FTA.

1.2 Analytical framework and methodology

Through a legal policy analysis (Pound, 1938) adopting the perspective of legal realism (Llewellyn, 1930) and incorporating a systematic examination of competing policy objectives, this article explores trade-offs of Sino-Arab economic relations and implications for an eventual FTA. The article implements a case study method with consideration to best practices, and a comparative legal analysis reflecting upon international law (Yin, 2018). Considerations of liberalism, sustainable development (Brundtland, 1987), and economic dependency (Baran, 1957) are incorporated to gauge the practical reality of utilising FTAs in this context to achieve wider goals such as sustainable development and technological innovation. These connected and contemporary issues are chosen to represent how non-trade provisions may be dealt with in economic negotiations within or beyond FTAs. They are selected due to their current critical relevance to China–Arab economic relations, and as they exemplify the complexities given their geopolitical relevance, their impact on the SDGs, and the risks of fostering technological and environmental dependency.

The methodology involves an evaluation of the strategy, policy, and legal approach between China and Arab countries. The article considers legal approaches to FTAs with comparisons between the Organisation for Economic Co-Operation and Development (OECD)-recommended trade agreements and their implications for possible trade agreements with other MENA countries.

1.3 Structure and design

The approach taken throughout involves examining whether the inclusion of non-trade provisions in the potential FTAs between China and GCC countries, could support MENA

states in their wider quest of achieving economic diversification through AI and sustainability measures to mitigate the impacts of climate change. The research then examines whether such FTAs could represent a model for other MENA countries through which they could ensure compliance with the multilateral trade system. These areas will involve exploring some of the leading scholarship in the field, while ascertaining key policy objectives and obstacles to an agreement.

By exploring the literature in Section 1.4, as well as practical progress and limitations towards an FTA, the article throughout evaluates whether inclusion of non-trade provisions such as sustainability in an FTA are realistic, or if such objectives would be better served with alternative or supplementary arrangements to the FTA. Consideration is also given to Arab (and subsequently American) concerns of technological dependency on China which may hinder the progress of any FTA. The article begins with a literature review in Section 1.4, which explores key literature and theories in the field, identifies gaps in the literature and explains how this study importantly addresses such gaps.

Section 2.1 then provides an overview of key strategies and policies between China and Arab countries, including the China–Arab States Cooperation Forum, China’s Arab Policy Paper, and the Belt and Road Initiative (BRI). Section 2.2 then overviews the possibilities of FTAs generally, before detailing how they can be used to achieve wider policy targets, namely related to the SDGs including environmental protection and technological innovation for economic development. It introduces OECD best practices available to trade negotiators for international legal agreements towards including legally binding sustainability objectives in trade agreements. Section 2.3 then examines how challenges of evolving sectors of cooperation, including AI and digital trade as part of the Digital Silk Road, have expanded beyond traditional areas of negotiation and may add complexity to FTA negotiations.

Section 3 analyses existing agreements between China and GCC countries to understand the potential for developing FTAs between them and their implications for other MENA countries. This section examines both trade and non-trade provisions in existing agreements to understand what could be included in an FTA. This goes onto provide an overview of key strategies and policies between China and Arab countries. These include the China—Arab States Cooperation Forum, China’s Arab Policy Paper, and the BRI, among others (OECD, 2018a). Renewable energy, sustainability, and technological innovation are considered in Section 3.4 to determine whether the inclusion of non-trade provisions in potential China–GCC FTAs could help Arab countries to achieve SDG targets—including renewable energy goals for climate change mitigation, technological innovation, and economic diversification. The section also explores whether such FTAs could serve as a model for other Arab countries to achieve policy objectives and how regional FTAs can help achieve environmental protection.

Section 3.5 discusses various challenges towards progress of achievement of a Chinese FTA with an Arab state. This overviews Chinese strategy and existing agreements (3.5.1), as well as Arab and geopolitical concerns of technological dependency and AI competition (3.5.2). It further explores legal problems including protectionism and competition (3.5.3), as well as the potential inability to agree binding dispute settlement procedures governing an FTA (3.5.4). In considering best practices from the OECD in international legal negotiations, (3.5.5) sets out how environmental protection and climate change requirements can be included in an FTA, and evaluates whether this is a suitable option in the context.

Section 4 presents summaries and conclusions following further analysis.

1.4 Literature review

There is a need to overcome the scarcity of comprehensive analyses that delve into the intricacies of China–MENA trade policies and their implications for recent developments

including emerging technologies and sustainable development. Limited scholarly research exists into the intersection between China's trade endeavours within the Arab world, the objectives of the mutual parties, and hindrances to the formation of an FTA. Official materials including the GCC's official website, offer only minimal information, while there is limited academic literature available. As such the role of FTAs in shaping China's economic relations with Arab states remains underexplored, necessitating further scholarly inquiry to explore inherent opportunities and challenges.

China's economic engagement in the Arab region, characterised by initiatives like the BRI, have reshaped the regional economic landscape and beyond. Scholars such as Wu (2015) offer insights into implementation of the "One Belt and One Road" framework and its implications for China–GCC relations. While initiatives like BRI have received extensive academic analysis—with the more recent Digital Silk Road less so—there is a need for a more recent and comprehensive study of their socio-economic, technological, and environmental ramifications within the Arab context. Chinese trade strategies in the MENA region, have been examined by Kaiser-Cross and Mao, which underscores the multifaceted dimensions of China's engagement, transcending mere economic interests (Kaiser-Cross and Mao, 2018, pp. 170–192).

The Asia Regional Integration Centre provides analyses of Asian integration dynamics and the crucial role of FTAs in advancing regional economic cooperation (ARIC, [no date](#)). FTAs are pivotal instruments which have the potential to facilitate China's trade expansion and integration into the Arab sphere to achieve economic and policy objectives including, recently, technological innovation. Indeed, China's trade aspirations hold promise for economic growth and enhancing technological and digital capabilities in the Arab world; Middle Eastern partners have recently depended upon China in AI innovation and development of clean technologies.

The most relevant research in this field, which is relevant to understanding the potential and limitations of FTAs, is conducted by Mogielnicki, who studies Sino-Arab relations resulting from mutual interests in digital and technology-led development (Mogielnicki, 2021, pp. 281–296). Mogielnicki explains how China has "... leveraged its comparative advantages in advanced technologies to expand and deepen its economic engagement with Gulf Arab states..." (Mogielnicki, 2021, p. 283). Mogielnicki rationalises research into the Sino-Gulf economic relationship as a case study, explaining "Gulf Arab countries largely possess the financial wherewithal to rapidly advance technology-driven agendas, and therefore these states offer useful case studies for understanding the trajectory of technology focused commercial partnerships between China and the MENA region" (Mogielnicki, 2021, p. 281). Indeed, Mogielnicki offers a highly pertinent paper that this article seeks to build upon, while Fulton provides a range of topical and timely references to expand upon, including energy relations (Mogielnicki, 2021, pp. 281–296; Fulton, 2022, pp. 1–432; Andrews-Speed and Yao, 2022, pp. 227–244). None offer such analysis from a law and policy perspective, however, requiring the present research to help fill this gap.

Concerns persist regarding alignment of economic objectives with sustainable development imperatives in FTAs, particularly pertaining to environmental sustainability and climate commitments. The OECD underscores the imperative of integrating environmental safeguards within regional trade accords to mitigate adverse environmental impacts (OECD, 2007, pp. 39–50). The works of Lanteigne, using the example of Switzerland, sheds light on the imperative of ecological collaboration to address environmental challenges associated with BRI initiatives, emphasising the necessity of integrating environmental safeguards within regional trade accords to mitigate adverse environmental impacts (Lanteigne, 2019, pp. 614–629).

Integral to the discourse on technological investments and sustainable development concerning China's trade engagements is the concept of eco-colonialism, as illuminated by

Alhadeff and Driessen (Alhadeff, 2023, pp. 129–163; Driessen, 2003, pp. 1–192). Arab countries may be concerned of the risks of becoming dependent on China for the supply and maintenance of technology for renewable energy (Stewart, 1977, pp. 114–140). Early studies by Stewart, UNCTAD, and Patel, all point to the risks of technological dependence (Stewart, 1977, pp. 114–140; UNCTAD, 1977, pp. 27–45; Patel, 1974, pp. 1–18). More recent studies are undertaken by Zheng on industrial development and its impact on carbon emissions in relation to sustainable development, and van der Vlist et al. specifically on dependency on AI technology firms (dubbed “Big AI”) (Zheng et al., 2023, pp. 81823–81838; van der Vlist, Helmond and Ferrari, 2024, no pagination). Such theoretical analysis will be built upon by this expansive law and policy analysis.

The development of AI and technological capacities in Arab countries may evolve into substantial technological dependency on Chinese labour, intellectual property, expertise, and continuous maintenance. Such concerns may be present in the negotiations of an FTA, and both parties may have concerns towards the inclusion of certain elements of sustainability in an FTA, should they be deemed against their interests or being overly committal. There may also be views that expanding FTAs to include wider policy objectives are a western trend towards affecting policy in the Global South, and not the Chinese or Arab way (see Chen (2019) on Southeast Asian views, for example). The notion underscored in academic literature concerns the asymmetries of power and exploitation of client nations of eco-products perpetuated by international trade and development initiatives, exacerbating environmental disparities (Corbin and Perry, 2019). A comprehension of these intricacies is important for evaluating the potential legal ramifications for potential FTAs and for fostering sustainable development outcomes. Further scholarly inquiry is warranted to delve into these dynamics comprehensively and appraise their implications as this article seeks to deliver.

2. FTAs, China, and the MENA region

2.1 Development of China’s strategic relationship with MENA countries

Since first appointing a Special Envoy to the Middle East in 2002, China has been working with MENA nations to ensure its growing strategic interests in the region (Ghiselli, 2022). This has resulted in several expansive initiatives which this section will overview to understand Chinese policy and strategy towards Arab countries, including the China–Arab States Cooperation Forum (CASCF), the BRI, and the Arab Policy Paper.

The China–Arab States Cooperation Forum (Ministry of Foreign Affairs, 2021) was developed in 2004 to facilitate multilateral cooperation, resulting in frequent joint events and meetings between the parties to consolidate a “Sino-Arab future-oriented strategic partnership of comprehensive cooperation and common development” (Ministry of Foreign Affairs, 2020). Collaboration has been at the level of both individual MENA countries as well as on a bloc scale involving the GCC itself.

The Chinese approach to the Arab region gained further importance with the establishment of the BRI (Belt and Road Portal, no date), launched in 2013, which the GCC countries have seen as a driver for strengthening bilateral cooperation. The project comprises six main paths, considered as “economic corridors,” providing a framework for the BRI and representing China’s vision of how foreign countries and regions can participate. Collaboration along the BRI follows the five principles of “policy coordination,” “facilities connectivity,” “unimpeded trade,” “financial integration,” and “people-to-people bond.” The Arabian Peninsula was not among the proposed areas of the initiative, according to the report on “China and Gulf Cooperation Council Countries: From Economic Deals to Strategic Partnerships.”

The BRI is however considered the most significant component of Chinese–Middle Eastern relations. Through it, China seeks to establish long-term cooperation with a majority of MENA nations while looking to shape its image as a responsible global power through shared governance values. All GCC countries are participating in the BRI through the China–Pakistan corridor; there is not a specific GCC corridor. BRI investment projects for foreign infrastructure are considerable, estimated globally at USD \$1 trillion (van der Leer and Yau, 2016) between 2017 and 2027 (OECD, 2018a).

China seeks FTAs with individual Gulf states (see Figure 1) as well as the GCC generally, and has continually expanded its investments in strategic sectors, such as a USD \$3.9 billion energy project with the United Arab Emirates (UAE) to construct a 700 MW solar energy plant and a USD \$1 billion energy transmission development project with Egypt (OECD, 2018b, Table 2.7). This is backed up by investments in developing local expertise, to demonstrate that China is not seeking Arab states' dependency on China. Chinese-owned Huawei has developed training academies to upskill the local workforce in AI and machine learning skills, in the UAE and Saudi Arabia. Huawei has also committed to training local AI engineers in cooperation with Saudi Data & AI Authority (SDAIA)'s National Centre for AI, to support Saudi's transition to a data-driven economy.¹

Commenting on the complexity of the outcomes of the BRI in the GCC, Fulton notes that while multiple high-value deals and agreements have been signed between GCC countries and China, there is some reluctance to pursue more extensive cooperation. No FTAs have been agreed between China and GCC countries, suggesting a cautious approach is being pursued by GCC states who may wish to build a track record of trust and successful outcomes before committing further to a full FTA. Gulf countries have also tended to diversify the nationalities of suppliers to ensure a lack of dependency on one state (Andrews-Speed and Yao, 2022).

The Gulf Cooperation Council countries have tended instead to use protocol visits and multilateral forums to affirm support for the Chinese initiative, to emphasise the complementary nature of national and regional development plans for their area (Tang, 2022, no pagination). Comprehensive support was indicated during the Sino-Arab Cooperation Forum in Beijing in July 2018, while the ministerial meeting held during the same period adopted the "Declaration of Action on China–Arab States Cooperation under the Belt and Road Initiative." China's rise in the Middle East through this type of initiative has also been analysed by Murphy, who explains that China's post-Mao modern approach is to promote economic development for mutual benefit, protect China's overseas business interests and citizens, foster political support in the international arena, and compete with the United States (Murphy, 2022, pp. 1–408; Krasnov and Yurtaev, 2016, pp. 616–627).

In terms of Chinese policy towards the Arab region, China recently issued its Arab Policy Paper, released to coincide with Xi Jinping's first presidential trip to the Middle East. The Paper stated the pillars of cooperation between China and the Arab nations and the guiding principles for developing China–Arab relations. This Policy Paper provides a concrete overview of policy priorities of the Chinese government in its engagement with MENA nations. These include a "blueprint" for Sino-Arab Cooperation and sets out a commitment to peace and stability in the MENA region (Ministry of Foreign Affairs, 2016).

In its Arab Policy Paper, China also stated support for an independent sovereign state of Palestine based on pre-1967 borders, pursuant to its Five Principles of Peaceful Coexistence. This willingness to make political and not only solely trade commitments to the MENA region, indicates China's strategy to build its influence. Tiezzi commented on

¹ The National Centre for Artificial Intelligence is a government agency established by Royal Order No. (74167) dated 29/12/1440 AH.



Figure 1. China's FTAs. Source: Financial Times (2024).

China's first Arab Policy Paper, which while lacking detail, represented a "... blanket vision for regional relations, without getting in to the complexities of how that vision will be realized in bilateral relationships with individual states" (Tiezzi, 2016, no pagination). In a more recent UN position paper, China has formally demanded a ceasefire in Gaza based on United Nations Security Council Resolution 2712,² and reiterated its call for an

² UN Security Council Resolution 2712 (2023)/adopted by the Security Council at its 9479th meeting, on 15 November 2023.

independent Palestine with East Jerusalem as its capital.³ China's clear position aligns with Arab states' political demands for Palestine, demonstrating a willingness to reinforce economic ties with diplomatic and political support for regional issues. President Xi explained: "All countries should respect each other's sovereignty, dignity and territorial integrity . . ." (Belt and Road Forum, 2017, no pagination). Such principles signal how any FTAs and future Sino-Arab Cooperation agreements would be formed, with relations based upon "mutual respect, fairness, justice, and mutually-beneficial cooperation" and a commitment to peace and stability (State Council, 2016).

Peace and stability in the Middle East would enable prosperity and certainly be in China's economic interests, allowing it to fulfil its BRI goals from more predictable trade routes. In a sign of enhanced engagement (Lons et al., 2019), expanding from trade to security, China hosted foreign ministers of several GCC countries in 2022 to enhance ties and security cooperation. While potentially extending China's regional security footprint (Vohra, 2022), Tang's analysis was that China is seeking to minimise shipping disruptions with GCC countries, while maintaining the focus of FTA negotiations on energy security (Tang, 2022, no pagination).

2.2 FTAs and sustainability

While FTAs are primarily focused upon agreeing mutually beneficial trade provisions between nations, they also offer an opportunity to agree non-trade provisions for wider policy purposes and enhanced cooperation. Countries have utilised FTAs to incorporate environmental protection provisions for example, helping them meet wider climate and sustainability commitments. Such measures can help environmentally-proactive nations ensure the products they import and export will be subject to similar environmental safeguards as in their own jurisdiction, and pushes other countries to improve their environmental standards in order to secure FTAs with other countries. Similar practices beyond cross-border trade can also be beneficial to serve goals beyond climate change, such as related to technological expertise which can help upskill the workforce in MENA countries.

Primarily, the OECD have made available best practices and guidance documents for countries wishing to include environmental protection clauses as part of, or connected to, FTAs (OECD, 2007, pp. 133–167). Such guidance documents focusing on environmental protection can serve as an example for various types of non-trade measures. Standards agreed can, for example, be backed up by third-party audits, or enforced through judicial procedures agreed, helping ensure the agreed objectives are fulfilled throughout the agreement and beyond the democratic cycle of the consenting governments. For example, in terms of environmental protection, decarbonisation methods towards achieving net zero recognise the need to avoid carbon leakage (HM Treasury, 2023), while carbon audits and carbon intensity assessments can allocate emissions over a product's lifecycle to correctly attribute emissions to a country and, thus, avoid exporting emissions accounting (Ong, 2023, pp. 207–234). Such measurement methods considering the value chain mean countries cannot claim to decarbonise if products they import are also carbon intensive since the negative externalities caused are accounted, and similar methods can be used for other environmental issues.

For Arab countries focused on realising their SDGs, inclusion of environmental protection and sustainability provisions in FTAs can be an option. Renewable energy technologies and emerging technologies such as AI, can help the Middle East achieve

³ Position paper of the People's Republic of China on Resolving the Palestinian–Israeli Conflict–Letter from China (15 December 2023) UN Doc A/78/35. Available at: <https://www.un.org/unispal/document/china-positions-paper-palestineisrael/> (Accessed 10 September 2024).

economic diversification and growth away from hydrocarbons. The extent of emissions from Gulf states, for example, has hindered their progress towards achieving the UNFCCC Paris Agreement undertakings, and climate risks to the Middle East are increasingly fatalist and apparent (Pal and Eltahir, 2016), provoking increasing regional action towards decarbonisation.

Recognising the benefits and best practices of including such environmental protections in an FTA, the hindrances to including such measures must be examined. The extensive diplomatic and trade-related difficulties already experienced in finalising an FTA between the GCC and China, may nevertheless render it implausible that an elusive FTA will include measures to benefit the SDGs and instead such issues may be agreed in measures external to the FTA. This is explored further throughout.

2.3 AI and the Digital Silk Road

The emphasis of FTAs between China and Arab countries is increasingly on key strategic areas expanding beyond traditional sectors such as energy and security, towards emerging fields of international competition including technological innovation and AI. Chinese newspaper *China Daily* has noted that “In addition to enhancing bilateral trade, modern FTAs encompass critical sectors such as services and digital trade” (*China Daily*, 2023, no pagination). As such, China has more recently directed considerable efforts towards consolidating MENA countries’ positions in the Digital Silk Road, covered in Section 3.2

3. Analysis of existing agreements

This section analyses existing agreements between China and GCC countries with a view to understanding the potential for further FTAs between them. In doing so, it recognises that there is limited content publicly available to examine, with the majority of material being made available only by official press releases. Importantly, this section studies parts of the Arab Policy Paper, the Silk Road Briefing, BRI, as well as bilateral cooperation agreements and cooperation groups. It attempts to ascertain the rationale behind the efforts being made, the obstacles to finalising an FTA, and the realism of inclusion of sustainability measures in any agreement.

The Arab Policy Paper also sets out a “1+2+3 cooperation pattern” of core interests. “1” represented energy—a central goal for China in the GCC. “2” represented infrastructure, construction, trade, and investment; while “3” represented nuclear energy, satellites, and new energy sources. Kaiser-Cross and Mao (2018) consider China’s approach to the GCC to be based upon a “win-win” strategy, reiterating statements made in China’s Arab Policy Paper (Kaiser-Cross and Mao, 2018, pp. 180–182).⁴ For this to be the case, Arab countries also want to know that they are sufficiently benefiting to merit entering the deal.

3.1 Trade

To date, China and GCC countries have reached agreements primarily on issues on trade in goods and energy products and have launched negotiations on trade in services. The Silk Road Briefing (2022) indicates the potential for trade in agriculture, fruits, spices, and construction materials (Devonshire-Ellis, 2022), while the Arab Policy Paper pushes for enhanced exports of Arab states’ non-oil products into the Chinese market. It is evident that China wishes to pursue further cooperation with Arab states, and the Arab Policy

⁴ “China is willing to coordinate development strategies with Arab states, put into play each other’s advantages and potentials, promote international production capacity cooperation and enhance cooperation” (State Council, 2016, no pagination).

Paper advocates the early execution of FTAs with them, as well as the elimination of protectionist rules and barriers to free trade such as tariffs and import inspections. It further advocates the development of trade dispute resolutions and remedies, personnel exchanges, and procedures on tackling counterfeit goods. Such trade agreements are therefore intended to be comprehensive, avoid the potential for disputes, and facilitate enhanced relations between both parties. The enhancement of peaceful and rules-based trade is mutually beneficial and furthers the objectives of the SDGs, though it should be recognised that China, like other powers including the US wishing to further trade and non-trade cooperation with Arab states, consider the agreements pragmatically with a view to secure rents and political influence (Beblawi, 1990; Waldner and Smith, 2014). Likewise, Arab states also seek the benefits of enhanced trade, investments, and access to advanced technologies and infrastructure development (Ibrahim, 2023).

Section 2.10 of the BRI focuses on developing trade cooperation mechanisms between the parties including inter-governmental economic and trade joint commissions, as explored by Fulton (Fulton, 2017, no pagination). Amongst such platforms are the China–Arab Joint Chamber of Commerce and the China–Arab States Expo. Such dialogue would seek further cooperation between the parties on trade, identify trade opportunities, and resolve disputes amicably.

Even in the absence of FTAs, China and the GCC have maintained interaction through a number of joint channels (Savicheva, Brebdane and Ryzhov, 2022, pp. 180–196.) including the GCC Joint Economic and Trade Committee, the Sino-Arab Economic and Trade Committee (2008) and the China–GCC Trade Cooperation Forum (Embassy of China in Sri Lanka, 2008). Similar entities were created in each of the member states of the GCC, such as the Oman–China Friendship Association (Embassy of China in Oman, 2013), the China–Qatar Business Council (no date), and the China–Kuwait Friendship Association (CPAFFC, 2013).

3.2 AI and technological innovation

A component of the BRI, the Digital Silk Road (Chaziza, 2022) is an initiative to increase digital connectivity and technological cooperation between China and other states. It is primarily focused upon on the digital economy, seeking to foster innovation, increase trade in digital goods and services, and support the development of smart cities and digital governance (Chipman, 2019). This has involved Chinese companies developing digital infrastructure in BRI partner countries, such as data centres, satellite systems, intelligent data centres, 5G networks e-commerce platforms, mobile payment systems, cloud storage, smart cities and more recently, AI infrastructure (Blanchard, 2021). Telecommunication providers in GCC states have entered substantial 5G contracts with Huawei contracts (Calabrese, 2019). Chaziza explains that

... the Middle East is prominent in the Digital Silk Road implementation... The Chinese government has called on Chinese firms to expand digital infrastructure construction... Chinese technology companies have been rolling out digital infrastructure that facilitates the gathering, transportation, storage, and processing of massive amounts of data from partner countries (Chaziza, 2022, no pagination).

Mogielnicki explains China's strategy in the GCC as follows:

Chinese institutions and technology firms compete heavily for contracts with Gulf governments and government-related entities. Huawei, for example, possesses an AI strategy – involving investing in AI research and engaging globally with academia, industries, and partners to develop an AI ecosystem and talent pipeline – that

overlaps neatly with state-led development initiatives, such as smart cities (Mogielnicki, 2021, p. 285).

Saudi Arabia and the UAE, in particular, have formed strategic partnerships with Chinese companies such as Alibaba Cloud and Huawei to advance smart city and energy infrastructure as well as AI technologies for government and private sector services. The Chinese e-commerce platforms are used by 80% of internet users in GCC countries, while China exports smart city technology to 15 Middle Eastern nations. Huawei has become prominent in Saudi Arabia, helping to manage the Mecca pilgrimage and providing solutions for sustainable energy storage. Huawei in the UAE has developed its 5G network and built strategic infrastructure focusing on technology and sustainability, including a solar-powered data centre (Chaziza, 2022). These trade and investment measures demonstrate the Digital Silk Road in action, and indicate the recent emergence of digital trade that has moved beyond traditional trade interests. The extent to which digital trade will be included in any FTA, however, remains to be seen.

3.3 Non-trade provisions: Energy and sustainability

The inclusion of non-trade provisions in existing cooperation agreements or statements of intent will be analysed to present legal options designed to mitigate the effects of climate change (Truby et al., 2022) and negative externalities when forming FTAs with China, demonstrating a focus upon SDGs, and increasing trade and energy interests (Chen, 2011). Section 2.2 of the BRI sets out a goal to increase “employment-oriented and environment-friendly production capacity cooperation, supporting Arab states in their efforts to realize industrialization.” (Belt and Road Portal, no date).

China is now the region’s largest trading partner (US\$ 272.6 billion in 2020). The Middle East has been a consistent supplier of around 40–50% of China’s crude oil imports and has long-term contracts to supply Liquefied Natural Gas (LNG) to China (BP, 2019, 2020). During the past decade, China–GCC trade has been on an upward trend reaching USD \$161.4 billion in 2020. This intensification in exchanges is visible in the field of energy. Saudi Arabia, the UAE, Kuwait, and Oman accounted for 32.5% of China’s total crude oil imports, compared to 24.3% in 2020 (Emirates Policy Center, 2022), with intensification in energy trade. The same year, China imported about 20% of its total LNG from Qatar (Emirates Policy Center, 2022). Observers expect that Chinese oil and gas imports from the GCC will continue to rise until the next decade, when Chinese consumption of fossil fuels is expected to peak.

A goal of the BRI is to build a low-carbon energy system and develop energy imports through strategic land corridors, identified in Chapter 30 of China’s 13th Five Year Plan (NDR, 2016). This could help secure such a goal, given the MENA region’s natural energy supply. Equally, Andrews-Speed and Yao explain that the Arab region seeks China’s help in developing renewable energy infrastructure, “As a global clean energy leader, China can offer countries in the Middle East renewable energy technology, project management expertise, and financial support where necessary.” (Andrews-Speed and Yao, 2022, p. 236).

The Arab Policy Paper section on energy promotes Sino-Arab energy investment cooperation in oil and gas extraction and production. Clean energy has also become a major issue of cooperation between China and the GCC in projects related to solar, wind, and hydropower projects. As such, Andrews-Speed and Yao indicate:

A number of Middle East countries have aligned their low-carbon development strategies with BRI to leverage the expertise of Chinese companies as well as to access financing. For Chinese renewable energy companies, the Middle East provides a very large business opportunity at a time when the commercial risks in their domestic renewable energy markets are growing (Andrews-Speed and Yao, 2022, p. 236).

Some Arab countries also intend to cooperate on renewable energy and build a China–Arab clean energy training centre. Five Arab countries signed agreements on cooperation with China in the field of production, including the UAE, Algeria, Saudi Arabia, Sudan, and Egypt. The BRI section on Investment and Trade Cooperation includes energy cooperation related to investment in core energy infrastructure construction (Harmon and Truby, 2019). This includes the development of innovative technology like nuclear energy, while Section 2.6 covers civilian nuclear cooperation including developing nuclear fuel and nuclear energy disposal facilities. This multi-purpose goal is in line with SDGs (see also Truby (2020)) as well as mutual interests on energy security (Andrews-Speed and Yao, 2022).

What this may mean in practice is Arab states selling oil and gas to China, but also becoming client states of China for solar panels, clean energy development and transition services, and high-value nuclear energy expertise. This is a concern to Arab countries, but the immediate benefits remain attractive. Clean energy hardware and expertise are required to meet the Arab region’s climate change goals and national development strategies seeking economic diversification and environmental protection, such as the Qatar National Vision 2030 (GCO, no date). Saudi Arabia aims to generate 50% of its energy from renewable sources by 2030 (Shehadi, 2021). Such measures would help MENA countries interested in the renewable energy transition, and both sides could benefit. While win-win and beneficial for the SDGs (as described by Bell (2012) particularly with low-carbon technology transfers) and be mutually beneficial in terms of policy objectives, this may lead to a form of eco-dependency from the Arab states on China (Mogielnicki, 2021).

As shown, Gulf countries depend on China for their shift towards clean energy, requiring technological and technical assistance. This situation is described by Goldthau, Eicke and Weko, who argue that states lacking technological supremacy may “... risk becoming politically dependent on the goodwill of the major green technology patent leaders ...” (Goldthau, Eicke and Weko, 2020, p. 330) including China. Scholars have drawn attention to the risk of eco-colonialism and this may be a reason for Arab states being cautious about legally binding sustainability measures in any FTA with China (Alhadeff, 2023, pp. 129–163; Driessen, 2003, pp. 1–192). However, to prove that Gulf Arab nations are not only consumers of Chinese technologies, Mogielnicki highlights that “Chinese firms such as Huawei have gone to great lengths to demonstrate their in-country value propositions” (Mogielnicki, 2021).

Nevertheless, “...global trade cannot be perceived as occurring on an equal playing field. Instead, the flows of goods and services may be a function of strategic trade policies, facilitated by preferential regimes or prevented by select tariff or non-tariff barriers” (Goldthau, Eicke and Weko, 2020, p. 330). In 2020, China’s Silk Road Fund acquired a 49% stake in ACWA Power Renewable Energy Holding, the largest power generation company in the Gulf region, increasing its investments in the GCC in renewable energy by 313% between 2014 and 2018. Furthermore, the Saudi Arabia-based ACWA Power, signed agreements with PowerChina, China Gezhouba Group Company (CGGC), and Bank of China in 2019 to collaborate in renewable energy ventures in the GCC.

The OECD identifies several objectives in the Arab Policy Paper aligned with achieving the SDGs, via a holistic approach to implementing the BRI, but identifies that such goals are contradicted⁵ by multiple coal-fired power stations being constructed in China’s partner countries (OECD, 2018a). China’s Ministry of Ecology and Environment has however announced its intention to enhance clean energy and low-carbon infrastructure construction and enforce environmental standards in construction, energy, and transport (Ministry of Ecology and Environment, 2017), though there is evidence that some activities

⁵ For further on contradictions see Paal (2013).

go against this ambition. China's aspiration in investing abroad in renewable energy projects is further motivated by the desire to address environmental impacts domestically (Wu, 2015). Such contradictions may limit the scope for achievement of the SDGs in the Sino-Arab partnership. China's Leading Group for the BRI further focused on water conservation through agreements with foreign partners (Office of the Leading Group for the BRI, 2017), while Chapter 18 of China's 13th Five Year Plan focuses on agriculture and food security, with the BRI being pivotal to such achievement.

3.4 Non-trade cooperation: Finance, infrastructure, and counter-terrorism

Further, mutually beneficial enhancement in cooperation is mentioned in Section 2.3. This focuses on increasing foreign direct investment between both the GCC and China, plus enhancing opportunities for finance and seeks to form a comprehensive taxation agreement to protect investors in the GCC and China against double taxation, with the goal of ensuring investment security. Section 2.9 of the BRI promotes financial cooperation, including in clearing houses and currency swaps and establishing overseas financial institutions. It further seeks to strengthen regulatory and legal agreements including cross-border regulatory cooperation, collaboration between financial organisations, and to improve the international financial system—though again details are not given as to how this would happen. Section 2.9 of the BRI invites Arab countries to join the Asian Infrastructure Investment Bank, and seven Arab countries joined the bank's Fund.⁶

Section 2.6 of the BRI encourages cooperation between the parties on infrastructure construction, particularly using Chinese companies and financial institutions to improve infrastructure in the Arab region. Specifically mentioned are mass transport such as roads, rail, seaports, and airports, as well as telecommunications and power infrastructure. China being pragmatic, realised an opportunity in both supplying the goods, services, and labour to construct such infrastructure in Arab states, and from the enhanced trade in utilising such advanced infrastructure. Arab states would in turn benefit from having such infrastructure and investment in construction. Arab countries will be cautious that projects, however, should be designed to maximise benefit and avoid the type of white elephant projects seen in Sri Lanka, where an airport and a port were built through China's Indian Ocean Strategy that have virtually never been used, leaving Sri Lanka with a situation of "debt diplomacy" with China (Gunasekara, 2017).

There are further non-trade aspects covered in cooperation agreements, including combating terrorism and extremist ideology. The BRI also intends for cooperation on space and satellite technology, including spaceflights, space education, and training. In practice, such measures would involve Arab states again being client states of China in terms of space and satellite technology; facilitating a reality of technological dependencies through training would help reduce dependence. Furthermore, BRI seeks for Arab states to adopt China's navigation satellite system (mentioned several times in the BRI), which amongst these may create further technology dependency exploiting the MENA region's space and satellite "technology gap" (a dependency scenario described by Castellacci, 2011) and perhaps risk a path towards techno-colonialism (Lüthi, Falk and Purtschert, 2016). Such a situation may contradict SDGs if it leads to dependency and a pattern of wealth leaving less developed countries towards wealthier ones.

3.5 Challenges to Sino-Arab FTAs

Despite cooperation and political intentions, no FTA yet covers Sino-Arab relations (ARIC FTA, no date). When considering the potential in this regard, this section will consider

⁶ UAE, Saudi Arabia, Jordan, Oman, Qatar, Kuwait, and Egypt.

OECD best practices in FTAs including on environmental protection provisions. Comparisons will be made with guidance from the OECD, such as its publication *Environment and Regional Trade Agreements*, which sets out guidance for environmental provisions and other agreements linked to regional trade agreements (OECD, 2007). The section sets out legal barriers as well as contextual barriers to the execution of an FTA.

3.5.1 *China strategy and existing agreements*

In recent years, China has sought to strengthen harmonious relations with Gulf countries by entering into strategic partnerships and encouraging the implementation of FTAs. This is part of a strategy where China is seeking a stable supply of energy and opening up trade routes. China and the GCC have held nine rounds⁷ of negotiations (China-GCA FTA, *no date*) but have not yet concluded an FTA. Negotiations were suspended in 2009 due to Chinese tariffs on GCC petrochemical exports and delayed due to disagreements (Fulton, 2020) with China over the Syrian war and later due to the blockade of Qatar (Pe'er, Niels and Bhusari, 2022). Such trade issues and practical concerns show the comparable strength in the GCC negotiating position, and that these countries are willing to forego enhanced trade to secure political goals. It also shows their interest in securing mutual trade advantages and not accepting what would be considered as unequal benefits, which remains in line with the win-win principles stated in the BRI.

Fulton (2017) explains that China and the GCC have maintained interaction through a number of joint channels such as GCC Joint Economic and Trade Committee, the Sino-Arab Economic and Trade Committee, and the China-GCC Trade Cooperation Forum (Fulton, 2017, no pagination; Savicheva, Brebdane and Ryzhov, 2022, pp. 180–196). China has announced the signing of agreements on cooperation with nine Arab countries,⁸ and most of the GCC countries were involved in the mentioned forums and mechanisms (Savicheva, Brebdane and Ryzhov, 2022, pp. 180–196). China and the GCC nations have then signed comprehensive strategic partnerships to enhance their bilateral relationship on several matters such as energy, infrastructure construction, technology, and investment. China has further signed cooperation agreements with GCC countries such as Qatar Strategic partnerships in 2014, the Saudi Arabia Comprehensive strategic partnerships in 2016, UAE Comprehensive strategic partnerships in 2018, Kuwait Strategic partnerships in 2018, and Oman Strategic partnerships in 2018 (Savicheva, Brebdane and Ryzhov, 2022, pp. 180–196).

China has implemented a partnership strategy that uses tools such as mutual trust, economic interdependence, cultural contacts, and security support as the main resources of diplomacy (Kamrava, 2018). The latter is based on the expansion and deepening of bilateral relations (Petrunina, 2016) which would enable Beijing to achieve its strategic objectives (Garlick and Havlova, 2020). Yet, the BRI is regarded as the most significant component of their relations (Liu, 2016).

3.5.2 *Technological dependency and AI diplomacy*

Section 2.2 indicated that MENA states may be cautious towards finalising an FTA with China due to concerns of digital dependency. In their existing agreements with China on

⁷ December 2016: The 9th Round of China-GCC FTA in Riyadh, Saudi Arabia; October 2016: The 8th Round Negotiation of China-GCC FTA in Beijing, China; May 2016: The 7th Round of China-GCC FTA in Guangzhou, China; January 2016: The 6th Round of China-GCC FTA in Riyadh, Saudi Arabia; June 2009: The 5th Round of China-GCC FTA in Riyadh, Saudi Arabia; July 2006: The 4th Round of China-GCC FTA, Jiaxing, China; January 2006: The 3rd Round of China-GCC FTA in Beijing, China; June 2005: The 2nd Round of China-GCC FTA in Beijing, China; April 2005: The 1st Round of China-GCC FTA in Riyadh, Saudi Arabia People's Republic of China, Ministry of Commerce, China-GCC FTA. Available at: <http://fta.mofcom.gov.cn/topic/engcc.shtml> (Accessed: 21 July 2022).

⁸ Saudi Arabia, Sudan, Iraq, Oman, Qatar, Kuwait, Lebanon, Egypt, and Morocco.

technology development, MENA states have sought to ensure that nationals will be trained and upskilled, to avoid the situation of having to rely entirely on Chinese labour and to enable innovation by skilled talent. Saudi Arabia's Digital Academy have, for example, agreed with Huawei to upskill local talent in AI, cloud computing, and other technology fields (Saudi Press Agency, 2022).

Nevertheless, while promising benefits, some commentators are suspicious that the Digital Silk Road is a strategic move by China to extend its geopolitical influence through control of key digital infrastructure. "China Standards 2035" has been criticised as a tactic to ensure it remains a permanent supplier of modern technologies, and provider of technological maintenance (Gorenburg, 2021). Mogielnicki explains this concern, cautioning that "Gulf Arab policymakers must think carefully about the nature of their involvement in the strategy [requiring] . . . continual reassessments on the part of regional governments concerning the net benefits of adopting Chinese technologies" (Mogielnicki, 2021, p. 291).

MENA states are also wary of becoming entangled in geopolitical issues related to becoming overly involved in Chinese AI technologies in a time of fierce international competition of AI supremacy. For example, G42, Abu Dhabi's state-owned AI firm has formed significant relationships with both the U.S. and China (White House Press Release, 2024), but has faced political scrutiny from the U.S. with demands to limit G42's relations with Chinese firms in order to continue benefiting from technological ties (Sakellariadis, 2024). This is an ongoing battle and Chaziza observes that "Despite Western efforts to curtail their global expansion, Huawei and other Chinese tech firms have been relentlessly extending their digital footprint across the Gulf region" (Chaziza, 2022, no pagination). Sam Winter-Levy (2024) describes how GCC states currently walk a tightrope in this East-West "AI diplomacy" due to the competition for global AI supremacy.

3.5.3 Protectionism and competition

During the past decade, China–GCC trade has intensified especially in the field of energy. Nine rounds of negotiations aimed at signing an FTA were spent to enhance interaction and remove tariff barriers. Pe'er, Niels, and Bhusari have written about the cooperation on Investment and Trade Cooperation between GCC and China, noting the latter has replaced the European Union as the GCC's largest trading partner (Pe'er, Niels and Bhusari, 2022).

Nevertheless, FTAs depend upon reciprocity and mutual advantage. Negotiations on FTAs were previously suspended in 2009 due to Chinese tariffs on GCC petrochemical exports (Fulton, 2020). Writing for the Emirates Policy Centre in 2017, Niblock argued the main obstacle to an FTA between GCC states and China (Niblock, 2017) to be China's protections of its domestic energy sector from competition, which restricts Gulf states from investing in the Chinese oil sector (Emirates Policy Center, 2022). Such obstacles on protectionism and free competition must be addressed to achieve an FTA (Bazoobandi, 2020). More recently, Saudi Arabia has launched its National Industrial Strategy (2022). The strategy seeks to increase its industrial base to increase non-oil exports, by rapidly building approximately 36,000 factories to multiply the industrial sector's GDP contribution to \$377 billion by 2035, up from \$88.26 billion in 2020. The intention of the strategy is to become a major developer and exporter in growth sectors including electric vehicles, renewable energy, and emerging technologies including AI, amongst other areas such as chemicals, aviation, and machinery. These industrial sectors would be highly competitive with imports from China, and as such have reportedly affected FTA negotiations (Cornwell, 2024).

Meanwhile, the GCC in late 2023 have successfully concluded FTAs with both Pakistan and South Korea, perhaps demonstrating a higher degree of comfort and less concerns about competition with those countries (Uppal and Elimam, 2023). The GCC–Korean FTA

involves eliminating most tariffs on LNG and other goods and services entering South Korea, while South Korean goods and services entering the GCC would be mostly tariff-free. The agreement covers 18 chapters, including "...trade in goods, services, government procurement, digital trade, cooperation in the field of small and medium-sized enterprises, customs procedures, intellectual property..." (GCC Secretary General, 2023). The intention evidently on both sides is to strengthen trade and cooperation with a major trading partner in areas of mutual benefit, and for GCC countries this involves utilising Korean expertise and investment to diversify the economy, encourage innovation in SMEs, and improve the digital economy—a key growth area recently. Gulf countries including Qatar, UAE, and Saudi Arabia have been promoting investment at the same time in emerging technologies growth, as well as encouraging SMEs through liberalisation of regulations.

Korea is interested in expanding access to the Gulf digital market and enhancing e-commerce opportunities, and the agreement seeks to reduce barriers to entry for Korean firms and immigrants. The FTA focuses upon specific areas of economic cooperation and includes separate areas of specific cooperation including energy but also technology-focused fields such as smart farms, audio-visual services as well as healthcare. The FTA with Pakistan was set out on similar grounds and focused on collaboration in areas including "...energy, health, food security, agriculture, security, transportation, environment, culture, and education" (Saudi Press Agency, 2023). It emphasised that measures would be introduced to protect investments, and again sought to increase the Gulf SME sector while protecting intellectual property rights.

This shows that Gulf countries and the GCC are open to strategic FTAs with trade partners that will be mutually beneficial and willing to diversify geographical partnerships in order to maximise collective benefits of strategic areas such as digital trade, while promoting trade generally. The reluctance to complete an FTA with China, despite the years of negotiations, appears to be partially because of wider political issues and a lack of agreement on certain key areas.

3.5.4 *Dispute settlement*

Another challenge in FTA negotiations is to agree on a dispute resolution mechanism in the agreement that enshrines legally binding provisions. This challenge has two sides. First, China often uses legal provisions to enforce control over its trading partners, which GCC countries see as detrimental to their sovereignty. Second, China considers that commercial disputes and arbitration directly harm bilateral relations at the political and economic levels (Puig and Yee, 2017).

To encourage trade and foreign direct investment, several Gulf countries have introduced alternative dispute resolution mechanisms and bodies for private parties to include to govern their contracts. The independence, privacy, and speed of regional arbitration bodies is preferential for many businesses over relying on local courts. These bodies, in particular, have governed free zone companies, mostly established by non-national investors and entrepreneurs, to increase confidence in the market. More recently, several Gulf countries have mediation laws and promoted mediation as a more amicable means of dispute resolution (Young, 2023).

For private parties, this may help promote regional trade and increase the confidence of Chinese investors in the GCC. However, there is no similar mechanism for state disputes, and the choice of dispute resolution body appears to have become a sticking point between the parties. To find a solution, comparisons can be drawn with OECD-recommended best practices on negotiating trade agreements. The best practice example is given in Canada's FTA with Panama, where the chapter on environmental protections does not fall within the purview of the agreement's dispute resolution procedure. Instead, the parallel

Agreement on Environment connected with the FTA incorporates its own distinct dispute resolution procedure. This separate process involves the bilateral environmental committee formed as part of the agreement, and the potential for an independent Review Panel related to effective enforcement and non-derogation obligations, with transparency obligations to ensure public scrutiny (OECD, 2007). Such measures are a possible option for the parties to develop an enforceable and agreeable measure.

3.5.5 Environmental protection and climate change

MENA countries interested in environmental protection may be included not to rely solely on the provisions for investments in clean energy that may be included in the BRI and other Chinese initiatives, as these are not sufficient to address the full range of environmental challenges and concerns (Truby, 2023, pp. 160–177). The BRI and other strategy documents on China envisage large-scale infrastructure and energy projects that could have significant adverse impacts on the environment and sustainability in the region, such as water scarcity, land degradation, biodiversity loss, air pollution, and climate change. The Financial Times explains that “Environmental and social impact studies are almost always absent from BRI infrastructure projects financed by China’s two big policy banks and its state-owned commercial banks” (FT Editorial Board, 2022, no pagination). Therefore, MENA countries may wish to seek to incorporate more comprehensive and robust environmental provisions in their trade and investment agreements with China, to ensure that these projects are conducted in an environmentally sound and responsible manner (Ibrahim, 2020).

China has not yet concluded any FTA with Arab countries, but it has established FTAs with various other nations, such as Cambodia, Mauritius, Maldives, Georgia, Australia, Korea, Switzerland, Iceland, Costa Rica, Peru, Singapore, New Zealand, Chile, and Pakistan (China FTAs, no date). However, these do not provide a positive model for environmental protection. For instance, the China–Australia FTA (*Free Trade Agreement between the Government of Australia and the Government of the People’s Republic of China*, 2015) and the China–Switzerland FTA do not contain any environmental provisions in their main texts or in their annexes or side agreements. Given that both Australia and Switzerland are known for their environmental proactiveness, and have strong bargaining power, this suggests that China may not have been willing to incorporate environmental issues into its FTAs (Lanteigne, 2019, pp. 614–629; Lanteigne, 2014, pp. 1–4).

Similarly, China’s regional FTAs set a poor precedent for environmental protection on their own, if there is no other relevant agreements. If there were a regional FTA with the GCC or MENA region, as opposed to individual bilateral agreements, it may take the form of The Regional Comprehensive Economic Partnership (RCEP). RCEP is an FTA between the member states of the Association of Southeast Asian Nations (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Vietnam) and its five FTA partners (Australia, China, Japan, New Zealand, and Republic of Korea) (ASEAN Secretariat, no date). RCEP seeks to eliminate import tariffs between RCEP signatory countries, and form common rules for e-commerce, trade, and intellectual property. RCEP, however, makes no commitments in its legal text to environmental sustainability (Ranald, 2020), and includes no non-trade provisions to mitigate climate change risks (Petri and Plummer, 2020). There appears to be reluctance to include specific environmental protection provisions in China’s FTA’s legal texts. This is despite China’s commitments to climate change goals internationally including its recent pledge under the Paris Agreement to peak its carbon dioxide emissions before 2030 and deliver net-zero emissions before 2060.

It may be that China prefers to make such commitments in non-trade-related agreements and commitments, such as the U.S.–China Joint Glasgow Declaration on Enhancing Climate Action in the 2020s (U.S. Department of State, 2021) which seeks to

establish joint regulatory frameworks and environmental standards related to reducing emissions of greenhouse gases and promote decarbonisation, and China's support of the Glasgow Leaders' Declaration on Forests and Land Use which aims to limit deforestation (UK National Archives, 2021). Such political commitments nevertheless importantly lack the enforceability mechanisms of the legal commitment made in FTAs.

MENA countries that are negotiating or planning to negotiate FTAs with China, either individually or collectively (such as through the GCC), may wish to consider adopting some of the best practices that have been used by other jurisdictions in regional trade agreements outside of RCEP. One of these best practices is the inclusion of a parallel Agreement on Environment, which complements and reinforces the environmental provisions in the FTAs. Canada has followed this approach in its FTAs with Jordan, Colombia, Peru, and Panama. For instance, the Canada–Panama FTA has both a preamble and a specific chapter that affirm the parties' commitment to implement the agreement in a manner that is consistent with environmental conservation and protection, to enforce their environmental laws and regulations, and to advance their environmental policies and standards. The agreement also has an annex that identifies priority areas for environmental cooperation, such as strengthening institutional and legal frameworks, managing protected areas, and conserving biodiversity.

The Canada–Panama Environmental Agreement sets out a comprehensive framework for environmental cooperation and protection between the two parties. It contains specific provisions on various environmental issues, such as biodiversity conservation, corporate social responsibility, and environmental performance improvement. It also establishes a number of obligations and commitments for the parties, such as ensuring high levels of environmental protection in their laws and policies, enforcing and enhancing their environmental standards, not lowering or relaxing environmental measures to attract trade or investment, conducting adequate environmental impact assessments, promoting environmental awareness and education, providing public access to information and participation on environmental matters, and ensuring effective remedies and fair judicial proceedings for environmental violations (OECD, 2007).

The Environmental Agreement is not a static document, but rather a dynamic and evolving one, as it requires continuous collaboration and dialogue between the parties to implement and monitor its environmental provisions. To this end, a bilateral committee is established to oversee the implementation of the agreement and to address any legal issues or disputes. Moreover, the agreement includes a provision for developing a joint work programme on environmental cooperation, which aims to enhance the parties' capacities to implement Multilateral Environmental Agreements and to address common environmental challenges.

One of the features of the Canada–Panama Agreement is that it incorporates the environmental exceptions of General Agreement on Tariffs and Trade (GATT)⁹ Article XX and General Agreement on Trade in Services (GATS)¹⁰ Article XIV, which apply to the provisions on technical barriers to trade, investment, and public procurement. These exceptions allow the parties to adopt or enforce environmental measures that may be inconsistent with WTO rules, if they are necessary to protect human, animal, or plant life or health, or to conserve exhaustible natural resources. This gives the parties some flexibility and autonomy in determining their own environmental objectives and policies, while also ensuring that they do not use them as a disguised restriction on trade (see further Lévesque, 2013, pp. 363–370).

⁹ General Agreement on Tariffs and Trade (GATT) 1947, General Agreement on Tariffs and Trade, 30 October, 61 Stat. A-11, 55 U.N.T.S. 194 [hereinafter GATT].

¹⁰ General Agreement on Trade in Services (GATS) 1994, Annex 1B, 15 April, 1869 U.N.T.S. 183, 33 I.L.M. 1167 [hereinafter GATS].

This is not an isolated example, as the OECD has documented numerous cases of environmental provisions being included in FTAs as annexes or parallel agreements, involving various countries and regions. Another common practice that has emerged recently is to conduct environmental impact assessments of proposed FTAs, to evaluate the potential positive or negative effects of increased trade on the environment and identify possible mitigation measures (George, 2014). These practices reflect the growing recognition of the need to integrate environmental considerations into trade policy.

Furthermore, to enhance the environmental outcomes of Regional Trade Agreements (RTAs), the OECD has developed a model checklist that covers various aspects of environmental provisions that negotiators can utilise (Tébar Less and Kim, 2008). This checklist is particularly relevant for Arab countries that are engaged in or planning to engage in FTAs with China, as well as separate or connected environmental agreements with the same partner. The model checklist provides guidance on how to define the scope and objectives of the agreement, the legal status and enforceability of the environmental provisions, and the institutional arrangements and mechanisms for their implementation and monitoring. It also suggests options for conducting environmental assessments and evaluations, involving third-party experts and stakeholders, and addressing potential environmental conflicts and disputes. Moreover, it covers the issues of environmental laws and standards, their harmonisation and enforcement, and the inclusion of safeguard clauses to prevent trade or environmental abuses. Arab countries may utilise such legal clauses to adopt a comprehensive and systematic approach to ensure that their trade agreements with China are consistent with their SDGs.

Nevertheless, both China and Arab countries may wish to limit the extent of environmental issues in the FTA, in order to complete the deal, and instead deal with sustainability issues separately. What has been shown in the cases of Australia and Switzerland is that these climate-advocating countries have not included environmental protection clauses in their FTAs with China. There is no indication that Arab countries are more inclined than those countries to ensure environmental provisions are enshrined in an FTA with China.

4. Conclusion

The article has examined why in over 20 years of increasingly developing economic relations and trade negotiations, an FTA between China and any Arab state has remained elusive. To understand this and the outstanding issues holding back accomplishment of such an agreement, the article has explored the evolution in trade discussions which originally focused on energy security and has more recently expanded into emerging areas of trade including technological development and renewable energy, to achieve environmental and economic sustainability in the Arab region. Such emerging issues have added complications and additional delay to the long sought after Sino-GCC FTA as well as with the wider MENA region. The article has explored whether the inclusion of non-trade provisions, particularly in the context of the rising AI and climate technologies trade and investment between China and GCC countries, can be beneficial in MENA state's quest for sustainable economic growth as part of progress towards achieving SDGs objectives.

The article has considered various wider issues hindering the opportunity for an FTA, including the geopolitical context and strategic goals. It has then delved into legal sticking points in the text of an FTA, including protectionism and competition, dispute settlement options, and the inclusion of environmental protection and climate change. To do this, the article has explored concerns of both China and Arab countries and their historical patterns in negotiations. Over the lengthy negotiation periods exceeding two decades, the

sectors of cooperation that were central to the talks initially have evolved, resulting in a game of “cat-and-mouse,” likely frustrating trade negotiators. Changing economic, technological, and geopolitical landscapes, including Gulf states’ own industrial, technological, and sustainability ambitions, have led to challenges and opportunities that have complicated and delayed the already sluggish efforts to deliver an FTA (Cornwell, 2024). The strategic focus on traditional sectors like energy and infrastructure has not diminished, but rather there are expanded and emerging areas of strategic importance to negotiate, such as artificial intelligence, digital trade, and sustainability. Such emphasis on technological advancements is fundamental for economic development, innovation, and capacity-building—critical components of the United Nations Sustainable Development Goals (SDGs) (UN, no date). AI and digital trade can boost economic growth in a time of fierce global competition and opportunity, while clean energy capacity development can be beneficial towards achievement of climate goals.

The research has investigated whether these FTAs could serve as a blueprint for other MENA countries to ensure compliance with the multilateral trade system while addressing environmental challenges, and the risks of technological dependency. Additionally, the study considers whether alternative strategies might offer more effective solutions in achieving non-trade objectives. In considering the risks of dependency and continuing competition, Mogielnicki argues that the “. . . formation of specific, mutually beneficial commercial linkages and the broader alignment of Chinese interests with the Gulf’s economic strategies has, thus far, outweighed the potential for conflict over diverging interests” (Mogielnicki, 2021, p. 291). Nevertheless, scholars have drawn attention to the risk of both eco-colonialism and technological dependency such as through China Standards 2035, and such concerns may be a reason for Arab caution in entering FTAs with China (Alhadeff, 2023, pp. 129–163; Driessen, 2003, pp. 1–192). The enhanced trade and energy links envisioned in the BRI and Digital Silk Road, may risk negative environmental externalities in the MENA region, as well as technological dependence on China and becoming a client state for the region’s own energy transitions. There are also indications that Chinese protectionism (Kratsas and Truby, 2015) of its own energy markets from Gulf investors may prevent the type of mutually beneficial model expressed and intended by both parties. Nevertheless, such issues can be overcome through negotiation and strategic dialogue.

The article has examined the various cooperation mechanisms, trade agreements, and political efforts, showing China has demonstrated a clear willingness to deepen trade and strategic links with the Arab region. Although the negotiations are confidential, public statements made strike a positive and optimistic tone about the proximity of such a deal (State Council, 2023). To date, the reality of an FTA between China and the GCC appears to be some way off. The article finds that the current trend appears to indicate that Arab countries are following a constructive yet cautious path to achieve their own objectives, through gradual enhancements in trade and dialogue with China, before concluding an FTA in the longer term. This is particularly the case following several high-profile examples of failed projects (Schepani, 2022) in other BRI countries (FT Editorial Board, 2022), leading to high levels of national debt to China without relative benefits (Parkin, 2022).

The article has focused specifically on sustainability and AI, both contemporary major issues affecting the progress of an FTA. It has examined whether, in particular, any FTA is likely to include sustainability or technology measures. The article finds that existing progress on an FTA focuses more on strategic economic interests including technology and renewable energy, but is less likely to include sustainable development specifically; environmental protection may form a separate agreement or limited part of the FTA. This is understood by examining precedents of existing FTAs. While acknowledging that specific details of an FTA between China and GCC or MENA countries remain unknown,

China's precedent FTAs with non-MENA countries provide insight into its preferred model. If this were to be replicated for Arab countries, it is unlikely that such FTAs would include specific provisions on environmental protections or climate change. This article has considered how Arab countries could protect their own environmental interests (Telling, 2022) by following OECD best practices. However, the article concedes that even highly environmentally-proactive countries have failed to include environmental protections in their FTAs with China, so this would be challenging.

The article recognises limitations available in literature and privacy in negotiation discussions, and calls for further research. It is hoped the research in this article is useful for further trade negotiations, legal and policy analysis, and additional academic research.

References

- Alhadeff, C. J. (2023). 'Equality as industrial capitalism's Trojan Horse: Environmental racism, green colonialism, and the renewable energies revolution', in Weir, L. (ed.) *Philosophy as practice in the ecological emergency, sustainable development goals Series*. Cham: Springer Nature, pp. 129–163.
- Andrews-Speed, P. and Yao, L. (2022). 'China's evolving energy relations with the Middle East', in Fulton, J. (ed.), *Routledge handbook on China-Middle East relations*. New York: Routledge, pp. 227–244.
- ARIC—Asia Regional Integration Center (no date). Available at: <https://aric.adb.org/> (Accessed: 1 October 2024).
- ARIC FTA—Asia Regional Integration Center (no date). *Tracking Asian integration, free trade agreements*. Available at: <https://aric.adb.org/fta> (Accessed: 27 July 2022).
- ASEAN Secretariat (no date). *Regional comprehensive economic partnership*. Available at: <https://rcepsec.org/> (Accessed: 2 August 2022).
- Baran, P. A. (1957). *The political economy of growth*. New York: Monthly Review Press.
- Bazoobandi, S. (2020). *The new regional order in the Middle East: Changes and challenges*. New York: Palgrave Macmillan.
- Beblawi, H. (1990). 'The rentier state in the Arab world', in Luciani, G. (ed.) *The Arab state*. London: Routledge, pp. 383–398.
- Bell, M. (2012). 'International technology transfer, innovation capabilities, and sustainable development', in Ockwell, D. G. and Mallett, A. (eds) *Low-carbon technology transfer: From rhetoric to reality*. New York: Routledge, pp. 21–47.
- Belt and Road Forum. (2017). *Work together to build the Silk Road Economic Belt and the 21st century Maritime Silk Road: Opening speech by H.E. Xi Jinping at the Belt and Road Forum for International Cooperation*. Available at: <http://2017.beltandroadforum.org/english/n100/2018/0306/c25-1038.html> (Accessed: 28 September 2024).
- Belt and Road Portal. (no date). Available at: <https://eng.yidaiyilu.gov.cn/> (Accessed: 28 September 2024).
- Blanchard, J.-M. F. (2021). *The Digital Silk Road, part I-cloudy networked world calling*. Available at: https://mnccenter.org/blog/digital-silk-road-part-i-cloudy-networked-world-calling?mc_cid=e2f4f937ef&mc_eid=3c886a8450 (Accessed: 20 September 2024).
- BP. (2019). *Statistical review of world energy*. 68th ed. Available at: <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2019-full-report.pdf> (Accessed: 28 September 2024).
- BP. (2020). *Statistical review of world energy*. (69th ed. Available at: <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2020-full-report.pdf> (Accessed: 28 September 2024).
- Brundtland, G. H. (1987). *Our common future*. Oxford: Oxford University Press.
- Calabrese, J. (2019). *The Huawei wars and the 5G revolution in the Gulf*. Available at: https://www.mei.edu/publications/huawei-wars-and-5g-revolution-gulf#_ftn1 (Accessed: 1 October 2024).
- Castellacci, F. (2011). 'Closing the technology gap?', *Review of Development Economics*, 15(1), pp. 180–197.
- Chaziza, M. (2022). *China-GCC digital economic cooperation in the age of strategic rivalry*. Available at: <https://www.mei.edu/publications/china-gcc-digital-economic-cooperation-age-strategic-rivalry> (Accessed: 10 September 2024).
- Chen, M. (2011). 'Exploring economic relations between China and the GCC states', *Journal of Middle Eastern and Islamic Studies (in Asia)*, 5(4), pp. 88–105.
- Chen, X. (2019). 'The future of free trade agreements: A Singapore perspective', *International Journal of Economic Policy Studies*, 13, pp. 259–271.
- China Daily. (2023). *China, GCC member economies keen to step up free trade talks*. Available at: https://english.www.gov.cn/news/202310/26/content_WS6539fb2fc6d0868f4e8e0b03.html (Accessed: 10 September 2024).

- China FTAs. (no date). *China's Free Trade Agreements*. Available at: http://fta.mofcom.gov.cn/english/fta_qianshu.shtml (Accessed: 18 July 2022).
- China-GCA FTA. (no date). *China FTA network*. Available at: <http://fta.mofcom.gov.cn/topic/engcc.shtml> (Accessed: 21 July 2022).
- China-Qatar Business Council. (no date). Available at: <https://eservices.qfc.qa/qfcpublicregister/PublicRegisterDetails.aspx?firmid=103855> (Accessed: 21 July 2022).
- Chipman, J. (2019). *China's long and winding Digital Silk Road*. Available at: <https://www.iiss.org/blogs/analysis/2019/01/china-digital-silk-road> (Accessed: 20 September 2024).
- Corbin, L. and Perry, M. (2019). *Free trade agreements: Hegemony or harmony*. Singapore: Springer.
- Cornwell, A. (2024). *China-Gulf free trade talks stall on Saudi industrial agenda, sources say*. Available at: <https://www.reuters.com/world/china-gulf-free-trade-talks-stall-saudi-industrial-agenda-sources-say-2024-05-14/> (Accessed: 10 September 2024).
- CPAFFC—Chinese People's Association for Friendship with Other Countries. (2013). *Delegation of Kuwait-China friendship association visits China*. Available at: <https://cpaffc.org.cn/index/news/detail/id/5649/lang/2.html> (Accessed: 21 July 2022).
- Devonshire-Ellis, C. (2022). *China looking for free trade agreement with Gulf Cooperation Council*. Available at: <https://www.middleeastbriefing.com/news/china-looking-for-free-trade-agreement-with-gulf-cooperation-council/> (Accessed: 28 September 2024).
- Driessen, P. (2003). *Eco-imperialism: Green power, black death*. New York: Merrill Press.
- Embassy of China in Oman. (2013). *China and Oman hold the 7th round of strategic consultations between the two foreign ministries*. Available at: https://www.fmprc.gov.cn/mfa_eng/gjhdq_665435/2675_665437/2863_663716/2865_663720/202406/t0240607_11411599.html (Accessed: 21 July 2022).
- Embassy of China in Sri Lanka. (2008). *Communiqué of the third ministerial meeting of the China-Arab Cooperation Forum*. Available at: http://lk.china-embassy.gov.cn/eng/zgxw/200806/t20080612_1396423.htm (Accessed 28 September 2024).
- Emirates Policy Center. (2022). *China-GCC free trade talks: Challenges and opportunities*. Available at: <https://epc.ae/en/details/featured/china-gcc-free-trade-talks-challenges-and-opportunities#edn19> (Accessed: 1 October 2024).
- Financial Times. (2024). *China's plan to reshape world trade on its own terms*. Available at: <https://www.ft.com/content/c51622e1-35c6-4ff8-9559-2350bfd2a5c1> (Accessed: 10 September 2024).
- FT Editorial Board. (2022). 'China's emerging Belt and Road debt crisis', *Financial Times*, 27 July. Available at: <https://www.ft.com/content/eb2d89f6-afd1-491e-b753-863e9727f6de> (Accessed: 27 July 2022).
- Free Trade Agreement between the Government of Australia and the Government of the People's Republic of China*. (2015). Available at: http://fta.mofcom.gov.cn/Australia/annex/xdzw_en.pdf (Accessed: 1 November 2024).
- Fulton, J. (2017). *The G.C.C. countries and China's Belt and Road Initiative (BRI): Curbing their enthusiasm?*. Available at: <https://www.mei.edu/publications/gcc-countries-and-chinas-belt-and-road-initiative-bri-curbing-their-enthusiasm> (Accessed: 11 November 2024).
- Fulton, J. (2020). 'Domestic politics as fuel for China's Maritime Silk Road Initiative: The case of the Gulf monarchies', *Journal of Contemporary China*, 29(122), pp. 175–190.
- Fulton, J. (2022). *Routledge handbook on China-Middle East relations*. New York: Routledge.
- Garlick, J. and Havlova, R. (2020). 'China's 'Belt and Road' economic diplomacy in the Persian Gulf: Strategic hedging amidst Saudi-Iranian regional rivalry', *Journal of Current Chinese Affairs*, 49(1), pp. 82–105.
- GCC Secretary General. (2023). *HE the GCCSG: Signing a free trade agreement between the GCC and the Republic of South Korea is a historic step towards achieving Gulf Economic Integration and enhancing economic and trade relations between the two sides*. Available at: <https://www.gcc-sg.org/ar-sa/MediaCenter/NewsCooperation/News/Pages/NEWS-2023-12-28-3.aspx> (Accessed: 1 October 2024).
- GCO—Government Communication Office (no date). *Qatar national vision 2030*. Available at: <https://gco.gov.qa/en/about-qatar/national-vision2030/> (Accessed: 12 August 2022).
- George, C. (2014). 'Developments in regional trade agreements and the environment: 2013 update', *OECD Trade and Environment Working Papers*, No. 2014/01. Available at: <https://www.oecd-ilibrary.org/docserver/5jz0v4qcg9zw-en.pdf?expires=1728568978&id=id&accname=guest&checksum=E2FA2C4EC287AB3DD40CBEE46E11B678> (Accessed: 10 October 2024).
- Ghiselli, A. (2022), 'A tough job: Chinese diplomats in the Middle East and North Africa', in Fulton, J. (ed.) *Routledge handbook on China-Middle East relations*. London: Routledge, pp. 355–367.
- Goldthau, A., Eicke, L. and Weko, S. (2020). 'The global energy transition and the global south', in Hafner, M. and Tagliapietra, S. (eds) *The geopolitics of the global energy transition*. New York: Springer, pp. 319–339.
- Gorenburg, D. (2021). *Three takeaways from China's new standards strategy*. Available at: <https://carnegieendowment.org/research/2021/10/three-takeaways-from-chinas-new-standards-strategy?lang=en> (Accessed: 19 September 2024).

- Gulf Cooperation Council. (2022). *The Cooperation Council for the Arab States of the Gulf*. Available at: <https://www.gcc-sg.org/en-us/Pages/default.aspx> (Accessed: 29 July 2022).
- Gunasekara, S. (2017). *Sri Lanka suffers from China's Indian Ocean Strategy*. Available at: <https://www.eastwestcenter.org/publications/sri-lanka-suffers-china%E2%80%99s-indian-ocean-strategy> (Accessed: 27 November 2018).
- Harmon, A. R. and Truby, J. M. (2019). 'Achieving green building in Qatar through legal and fiscal tools', *Journal of Sustainable Development*, 12(5), pp. 96–111.
- HM Treasury. (2023). *Addressing carbon leakage risk to support decarbonisation: Summary of consultation responses and government response*. Available at: https://assets.publishing.service.gov.uk/media/657c7fbd95bf6500d7190cb/2023_Government_Response_-_Addressing_Carbon_Leakage_Risk.pdf (Accessed: 1 October 2024).
- Ibrahim, I. A. (2020). 'The importance of International Water Law to the successful implementation of the Belt and Road Initiative: Evidence from central Asia', in Martinico, G. and Wu, X. (eds) *A legal analysis of the Belt and Road Initiative*. London: Palgrave Macmillan, pp. 145–169.
- Ibrahim, I. A. (2023). 'Energy transition and Sustainable Development Goal 7: A legal analysis in the context of the Arab world', *Journal of World Energy Law & Business*, 16(2), pp. 77–90.
- Kaiser-Cross, S. and Mao, Y. (2018). 'China's strategy in the Middle East and the Arab World', in Eisenman, J. and Heginbotham, E. (eds) *China steps out: Beijing's major power engagement with the developing world*. New York: Routledge, pp. 170–192.
- Kamrava, M. (2018). *Troubled waters: Insecurity in the Persian Gulf*. Ithaca: Cornell University Press.
- Krasnov, K. G. and Yurtaev, V. I. (2016). 'The foreign policy of Iran in the Middle East and the American strategy of "system containment"', *International Relations (Vestnik RUDN)*, 16(4), pp. 616–627.
- Kratsas, G. and Truby, J. (2015). 'Regulating sovereign wealth funds to avoid investment protectionism', *Journal of Financial Regulation*, 1(1), pp. 95–134.
- Lanteigne, M. (2014). *The Sino-Swiss Free Trade Agreement*, Center for Security Studies, Analyses in Security Policy No. 147, pp. 1–4. Available at: <https://css.ethz.ch/content/dam/ethz/special-interest/gess/cis/center-for-security-studies/pdfs/CSSAnalyses147-EN.pdf> (Accessed: 11 November 2024).
- Lanteigne, M. (2019). 'The China–Switzerland Free Trade Agreement and economic identity-building', *Journal of Contemporary China*, 28(118), pp. 614–629.
- Lévesque, C. (2013). 'The inclusion of GATT Article XX exceptions in IIAs: A potentially risky policy', in Echandi, R. and Sauvé, P. (eds) *Prospects in international investment law and policy: World Trade Forum*. Cambridge: Cambridge University Press, pp. 363–370.
- Liu, Z. (2016). 'Historical evolution of relationship between China and the Gulf Region', *Journal of Middle Eastern and Islamic Studies (in Asia)*, 10(1), pp. 1–25.
- Llewellyn, K. N. (1930). 'A realistic jurisprudence—The next step', *Columbia Law Review*, 30, p. 431.
- Lons, C., Fulton, J., Sun, D. and Al-Tamimi, N. (2019). *China's great game in the Middle East*. Available at: https://ecfr.eu/publication/china_great_game_middle_east (Accessed: 21 October 2022).
- Lüthi B., Falk F. and Purtschert P. (2016). 'Colonialism without colonies: Examining blank spaces in colonial studies', *National Identities*, 18(1), pp. 1–9.
- Ministry of Ecology and Environment—People's Republic of China. (2017). *The Belt and Road Ecological and Environmental Cooperation Plan*. Available at: https://english.mee.gov.cn/Resources/Policies/policies/Frameworko/rkp1/201706/t20170628_416869.shtml (Accessed: 1 October 2024).
- Ministry of Foreign Affairs—People's Republic of China. (2016). *China's Arab Policy Paper*. Available at: https://english.www.gov.cn/archive/publications/2016/01/13/content_281475271412746.htm (Accessed: 1 November 2024).
- Ministry of Foreign Affairs—People's Republic of China. (2020). *China-Arab States Cooperation Forum holds ninth ministerial conference*. Available at: https://www.mfa.gov.cn/eng/wjb/zjzg_663340/xybfs_663590/xwlb_663592/202406/t20240606_11387282.html (Accessed: 1 November 2024).
- Ministry of Foreign Affairs—People's Republic of China. (2021). *China-Arab states cooperation forum holds the 17th senior officials' meeting and the 6th senior official level strategic political dialogue*. Available at: https://www.mfa.gov.cn/eng/zy/jj/2020zt/kjgzbdyyq/202406/t20240606_11380035.html (Accessed: 1 November 2024).
- Mogielnicki, R. (2021). 'Technological dimensions of China–MENA economic relations', in Fulton, J. (ed.) *Routledge handbook on China–Middle East relations*. New York: Routledge, pp. 281–296.
- Murphy, D.C. (2022). *China's rise in the global south: The Middle East, Africa, and Beijing's alternative world order*. Stanford: Stanford University Press.
- National Industrial Strategy. (2022). *HRH Crown Prince launches national strategy for industry*. Available at: <https://www.spa.gov.sa/w1799988> (Accessed: 1 October 2024).
- NDRC—National Development and Reform Commission. (2016). *13th Five-Year Plan on national economic and social development*. Available at: <https://en.ndrc.gov.cn/policies/202105/P020210527785800103339.pdf> (Accessed: 1 November 2024).

- Niblock, T. (2017). 'Problems and opportunities for China in developing its role in the Gulf region', *Asian Journal of Middle Eastern and Islamic Studies*, 11(3), pp. 1–11.
- Office of the Leading Group for the BRI. (2017). *Building the belt and road: Concept, practice and China's contribution*. Beijing: Foreign Language Press.
- OECD. (2007). *Environment and regional trade agreements*. Paris: OECD Publishing.
- OECD. (2018a). *China's Belt and Road Initiative in the global trade, investment and finance landscape*. Available at: https://doi.org/10.1787/bus_fin_out-2018-6-en. (Accessed: 1 November 2024).
- OECD. (2018b). *Business and finance outlook*. Available at: <https://doi.org/10.1787/9789264298828-en> (Accessed: 13 July 2022).
- Ong, J. (2023) 'Decarbonizing international shipping at the IMO: Are alternative fuels the way forward?', *Carbon & Climate Law Review*, 17, pp. 207–234.
- Paal, D. (2013). *Contradictions in China's foreign policy*. Available at: <http://carnegieendowment.org/2013/12/13/contradictions-in-china-s-foreign-policy-pub-53913-comments> (Accessed: 1 October 2024).
- Pal, J. and Eltahir, E. (2016). 'Future temperature in southwest Asia projected to exceed a threshold for human adaptability', *Nature Climate Change*, 6, pp. 197–200.
- Parkin, B. (2022). 'Bangladesh's finance minister warns on Belt and Road loans from China', *Financial Times*, 9 August. Available at: <https://www.ft.com/content/65632129-dd75-4f23-b9c4-9c0496840a54> (Accessed: 12 August 2022).
- Patel, S. J. (1974). 'The technological dependence of developing countries', *The Journal of Modern African Studies*, 12(1), pp. 1–18.
- Pe'er, I., Niels, G. and Bhusari, M. (2022). *Strengthening ties: China and the GCC*. Available at: <https://www.atlanticcouncil.org/blogs/econographics/strengthening-ties-china-and-the-gcc/> (Accessed: 20 July 2022).
- Petri, P. A. and Plummer, M. G. (2020). *RCEP: A new trade agreement that will shape global economics and politics*. Available at: <https://www.brookings.edu/blog/order-from-chaos/2020/11/16/rcep-a-new-trade-agreement-that-will-shape-global-economics-and-politics/> (Accessed: 3 August 2022).
- Petrunina, Z. V. (2016). 'China and Middle Eastern countries: The history of relations in the later twentieth and beginning of the twenty-first centuries', *Scientific Notes of Komsomolsk-on-Amour State Technical University*, 2(1), pp. 16–20.
- Pound, R. (1938). *The formative era of American law*. Boston: Little, Brown and Company.
- Puig, G. V. and Yee, A. T. H. (2017). 'Challenges and opportunities of the China-Gulf cooperation', *Hastings International and Comparative Law Review*, 40(1), pp. 123–158.
- Ranald, P. (2020). *RCEP has limited trade gains and ignores labour and human rights*. Available at: <https://www.internationalaffairs.org.au/australianoutlook/rcep-has-limited-trade-gains-and-ignores-labour-and-human-rights/> (Accessed: 3 August 2022).
- Sakellariadis, J. (2024). *Commerce-backed deal with Emirati AI Giant sets off alarm bells in Congress*. Available at: <https://www.politico.com/news/2024/05/24/ai-china-uae-00159713> (Accessed: 10 September 2024).
- Saudi Press Agency. (2022). *Saudi Digital Academy signs Memorandum of Understanding with Huawei to develop local tech talents*. Available at: <https://www.spa.gov.sa/2326478> (Accessed: 28 September 2024).
- Saudi Press Agency. (2023). *GCC Secretary General: Preliminary GCC-Pakistan FTA reflects importance of strengthening trade relations with countries, blocs*. Available at: <https://www.spa.gov.sa/en/bab0aad6b7e> (Accessed: 1 October 2024).
- Savicheva E. M., Brebdane A. M. and Ryzhov I. V. (2022). 'China and Gulf Cooperation Council countries: From economic deals to strategic partnerships', *International Relations (Vestnik RUDN)*, 22(1), pp. 180–196.
- Schepani, A. (2022). 'China's role at the heart of Kenya's election campaign', *Financial Times*, 3 August. Available at: <https://www.ft.com/content/40ea35ea-b9b2-4c92-b595-e5ab191431df> (Accessed: 12 August 2022).
- Shehadi, S. (2021). *How Saudi Arabia's energy transition means more China and less us*. Available at: <https://www.investmentmonitor.ai/sectors/energy/saudi-energy-transition-china> (Accessed: 27 July 2022).
- Silk Road Briefing. (2022). Available at: <https://www.silkroadbriefing.com/news/2022/01/11/china-looking-for-free-trade-agreement-with-gulf-cooperation-council/> (Accessed: 13 July 2022).
- State Council—The People's Republic of China. (2016). *Full text of China's Arab policy paper*. Available at: http://english.www.gov.cn/archive/publications/2016/01/13/content_281475271412746.htm (Accessed: 15 July 2022).
- State Council—The People's Republic of China. (2023). *China, GCC member economies keen to step up free trade talks*. Available at: https://english.www.gov.cn/news/202310/26/content_WS6539fb2fc6d0868f4e8e0b03.html (Accessed: 1 October 2024).
- Stewart, F. (1977). 'Technological dependence', in Stewart, F. (ed.), *Technology and under development*. London: Palgrave Macmillan, pp. 114–140.
- Tang, F. (2022). 'China meets Gulf oil bloc with sights set on free-trade agreement and energy security', *South China Morning Post*, 12 January. Available at: <https://www.scmp.com/economy/china-economy/article/3163121/china-meets-gulf-oil-bloc-sights-set-free-trade-agreement-and> (Accessed: 1 October 2024).

- Tébar Less, C. and Kim, J. A. (2008). *Checklist for negotiators of environmental provisions in regional trade agreements: OECD trade and environment working papers, No. 2008/02*. Available at: https://www.oecd-ilibrary.org/trade/checklist-for-negotiators-of-environmental-provisions-in-regional-trade-agreements_235708858388 (Accessed: 1 November 2024).
- Telling, O. (2022). 'Chinese state-owned company accused of endangering rare orang-utans', *Financial Times*, 19 June. Available at: <https://www.ft.com/content/b15d75ea-cced-4204-8540-912f9e693a5e> (Accessed: 12 August 2022).
- Tiezzi, S. (2016). *Revealed: China's blueprint for building Middle East relations*. Available at: <https://thedi diplomat.com/2016/01/revealed-chinas-blueprint-for-building-middle-east-relations/> (Accessed: 22 June 2022).
- Truby, J. (2020). 'Governing artificial intelligence to benefit the UN sustainable development goals', *Sustainable Development*, 28, pp. 946–959.
- Truby, J. (2023). 'Decarbonizing the GCC: Sustainability and life after oil and in GCC countries', *The Journal of World Energy Law & Business*, 16(2), pp. 160–177.
- Truby, J., Brown, D. R., Dahdal, A. and Ibrahim, I. (2022). 'Blockchain, climate damage, and death: Policy interventions to reduce the carbon emissions, mortality, and net-zero implications of non-fungible tokens and Bitcoin', *Energy Research & Social Science*, 88, pp. 102499.
- UK National Archives. (2021). *Glasgow leaders' declaration on forests and land use*. Available at: <https://webarchive.nationalarchives.gov.uk/ukgwa/20230418175226/https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/> (Accessed: 5 August 2022).
- UN. (no date). *UN sustainable development goals*. Available at: <https://sdgs.un.org/goals>
- UNCTAD Secretariat. (1977). 'Technological dependence: Its nature, consequences and policy implications', *Technology and Development in Africa*, 2(2), pp. 27–45.
- Uppal, R. and Elimam, A. (2023). *GCC-South Korea sign free trade deal in boost to Gulf-Asia economic ties*. Available at: <https://www.reuters.com/world/middle-east/gulf-cooperation-council-signs-free-trade-agreement-with-south-korea-gcc-2023-12-28/> (Accessed: 28 September 2024).
- U.S. Department of State. (2021). *U.S.-China Joint Glasgow Declaration on enhancing climate action in the 2020s*. Available at: <https://www.state.gov/u-s-china-joint-glasgow-declaration-on-enhancing-climate-action-in-the-2020s/> (Accessed: 5 August 2022).
- van der Leer, Y. and Yau, J. (2016). *China's new silk route: The long and winding road*. Available at: www.pwc.com/gx/en/growth-markets-center/assets/pdf/china-new-silk-route.pdf (Accessed: 12 July 2022).
- van der Vlist, F., Helmond, A. and Ferrari, F. (2024). 'Big AI: Cloud infrastructure dependence and the industrialisation of artificial intelligence', *Big Data & Society*, 11(1), no pagination.
- Vohra, A. (2022). 'Xi Jinping has transformed China's Middle East Policy', *Foreign Policy*, 1 February. Available at: <https://foreignpolicy.com/2022/02/01/xi-jinping-has-transformed-chinas-middle-east-policy/> (Accessed: 22 June 2022).
- Waldner, D. and Smith, B. (2014). 'Rentier states and state transformations', in Leibfried, S., Huber, E., Lange, M., Levy, J. D. and Stephens, J. D. (eds) *Oxford handbook on transformations of the state*. Oxford: Oxford University Press, pp. 1–32.
- White House Press Release. (2024). *United States and United Arab Emirates cooperation on artificial intelligence*. Available at: <https://www.whitehouse.gov/briefing-room/statements-releases/2024/09/23/united-states-and-united-arab-emirates-cooperation-on-artificial-intelligence/> (Accessed: 24 September 2024).
- Winter-Levy, Sam. 'The emerging age of AI diplomacy', *Foreign Affairs*, 2024. Available at: <https://www.foreignaffairs.com/united-states/emerging-age-ai-diplomacy> (Accessed: 1 November 2024).
- Wu, S. (2015). 'Constructing 'One Belt and One Road' and enhancing the China — GCC cooperation', *Journal of Middle Eastern and Islamic Studies (in Asia)*, 9(2), pp. 1–15.
- Yin, R. K. (2018). *Case study research: Design and methods*. 6th ed. Thousand Oaks: Sage Publications.
- Young, P. M. (2023). *An analysis of UAE's Commercial Mediation Law: Federal Law No. 6 of 2021*. Available at: <https://www.menaexecutive training.com/post/an-analysis-of-uae-s-commercial-mediation-law-federal-law-no-6-of-2021-it-s-scope> (Accessed: 1 October 2024).
- Zheng, Y., Xiao, J., Huang, F. and Tang, J. (2023). 'How do resource dependence and technological progress affect carbon emissions reduction effect of industrial structure transformation? Empirical research based on the rebound effect in China', *Environmental Science and Pollution Research*, 30, pp. 81823–81838.