



---

# Saudi Arabia's Vision 2030: *Progress and Priorities*

Nick Santhanam, CEO, Fernweh Group  
Gaurav Batra, President & CEO, Ayna.AI  
Nidhi Arora, Vice President, Ayna.AI  
Nitik Gupta, Analyst, Ayna.AI

June 2023

# Contents



Executive Summary

03

1. Saudi Arabia's Vision 2030

07

2. Promising Trends and Role Models

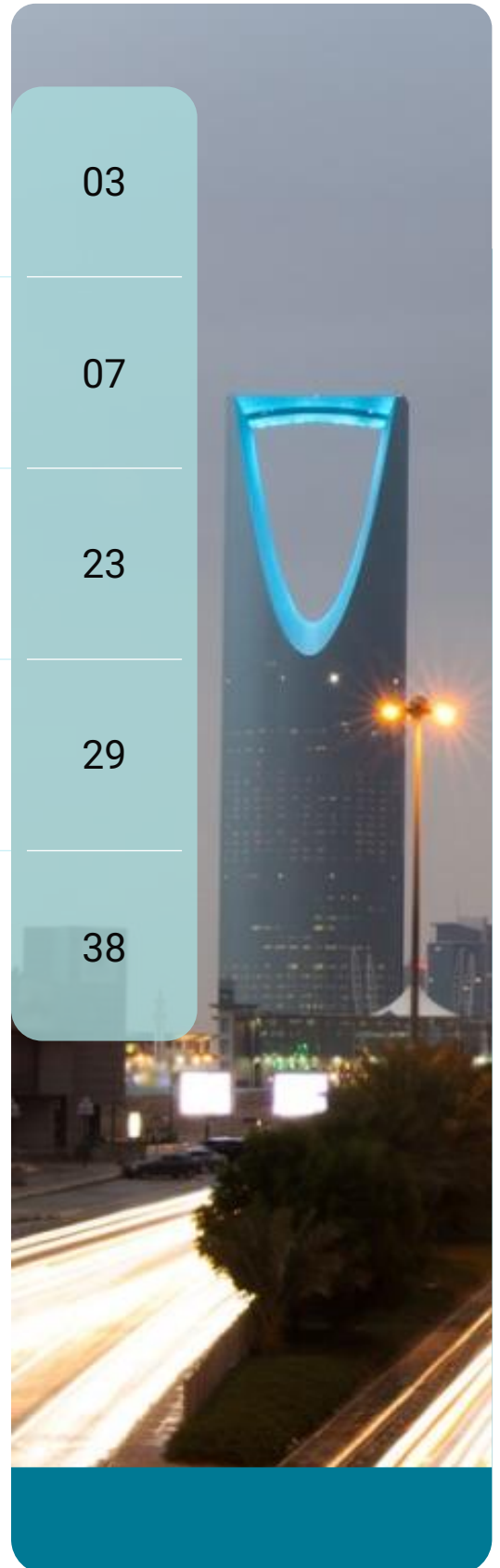
23

3. Who's Involved and Who Should Be

29

4. Priority Moves to Achieve Vision 2030

38



# Executive Summary



In April 2016, the Kingdom of Saudi Arabia announced Vision 2030, its ambitious plan for economic transformation and social reform. This vision, if realized, will open the kingdom to the world and unlock its vast potential, ushering in a new era of economic diversification and opportunity. A strategic approach to assessing the environment, choosing external partners, and prioritizing initiatives can accelerate the transformation and enhance its outcomes.

## Saudi Arabia's Vision 2030

Vision 2030 aims to unleash the kingdom's potential by developing alternatives to an overreliance on oil as its source of economic strength. The 2014–15 collapse in oil prices led to a fiscal deficit in 2016—the first time since 2007—and dwindling financial reserves.

Vision 2030 has three core themes. First, it seeks to create a vibrant society by strengthening Islamic values and national identity and by offering Saudi citizens fulfilling and healthy lives. Second is the goal of developing a thriving economy with increasing employment and a larger and more diversified economy. The third theme of Vision 2030 is to ensure an ambitious nation by enhancing government effectiveness and enabling social responsibility.

This vision sets ambitious targets for 2030. These include increasing average life expectancy from 74 to 80 years, lowering unemployment from 11.4% to 7%, increasing the share of non-oil exports in non-oil GDP from 16% to 50%, and improving Saudi Arabia's ranking in the Government Effectiveness Index from 80th place to 20th.

## Promising Trends and Role Models

In the years since the vision was announced, Saudi Arabia has made significant progress, although there is room to accelerate the transformation. We see favorable trends in metrics across each of the three core themes:<sup>1</sup>

- 1. Vibrant society.** Life expectancy increased from 74.8 years in 2016 to 75.3 years in 2020, and Saudi Arabia ranked third happiest in the Arab world (2022).
- 2. Thriving economy.** Non-oil government revenue increased 122% from 2015 to 2021, and female labor participation rose from 19.4% in 2016 to 35.6% in 2021.
- 3. Ambitious nation.** Volunteerism in Saudi Arabia increased 14-fold from 2016 to 2021, and the kingdom received a top global ranking for the COVID-19 response of its government and entrepreneurs.

1. Statistics reported in "Vision 2030: A Story of Transformation," Kingdom of Saudi Arabia, <https://www.vision2030.gov.sa>.



Along with these and other signs of progress, Saudi Arabia has potential to find inspiration in examples from other parts of the world, especially China's 40 years of economic reforms. Some potentially relevant moves by China have included adaptable policies for a long-term vision; digitization through policies, regulations, and investments; rapid industrialization via R&D and attraction of foreign direct investment; a global strategy with inward and outward investments, and establishment of win-win partnerships through rigorous criteria and due diligence.

### Who's Involved and Who Should Be

Investments and other support have already flowed into Saudi Arabia from the public and private sectors. Countries in Europe and Asia have invested in projects, partnered on various initiatives, and offered encouragement. France has so far been the largest investor, with direct investments of \$4.4 billion with digital and healthcare sectors particularly catching the country's eyes.<sup>2</sup>

China has been a major trade partner: trade of goods between China and Saudi Arabia increased 32.9% in 2022, reaching \$116 billion.<sup>3</sup> In addition, Alibaba and Saudi's Public Investment Fund (PIF)-backed eWTP Arabia Capital have invested \$320 million in the cloud and digital sector since 2019.<sup>4</sup> Other countries making notable contributions to Saudi projects include Japan, Korea, and the United Kingdom.

Investment activity is increasing across sectors. For example, EIG Global Energy Partners and Aramco are investing in alternative fuels, carbon capture, hydrogen, natural gas, and energy storage;<sup>5</sup> tech giants Amazon, Oracle, Microsoft, Cisco, and IBM are creating digital capability centers and innovation hubs for tech start-ups;<sup>6</sup> and global construction firms securing infrastructure projects include Bechtel for project management of Neom.<sup>7</sup> Among companies, GE is leading the way, having signed memoranda of understanding with Aramco, Dussur, Ma'aden, King Fahad Medical City, and Saudi Telecommunications Company.<sup>8</sup>

2. Zaid Khashoggi, "Saudi Arabia, France Strengthen Business, Trade Relations in Line with Vision 2030 Investment Plans," *Arab News*, updated June 1, 2021, <https://www.arabnews.com>.
3. "Chinese Firms Flock to Saudi Arabia in Middle East Gold Rush," *ThinkChina*, May 12, 2023, <https://www.thinkchina.sg>.
4. Ibid
5. "EIG and Aramco Sign MoU to Extend Energy Collaboration," news release, EIG, June 16, 2022, <https://eigpartners.com>.
6. Divsha Bhat, "Saudi Announces \$1.2bn Tech Initiatives, including All-New LEAP and @Hack Events," *Gulf Business*, August 25, 2021, <https://gulfbusiness.com>.
7. NEOM Selects U.S. Construction Leader Bechtel to Accelerate Primary Infrastructure Development for Its Cognitive Cities," Neom, August 10, 2020, <https://www.neom.com>.
8. "In Support of Saudi Vision 2030: Saudi Arabia and GE announce raft of MoUs and Agreements Worth \$15 Billion in Industrial Project Development and Cross-Sector Capacity Building, news release, General Electric, May 20, 2017, <https://www.ge.com>.





Despite the rush, inflows of foreign direct investment (FDI) totaled just \$34.9 billion for the period 2017–21, half the amount flowing into the United Arab Emirates during the same period.<sup>9</sup> In 2022, FDI inflows reached \$7.9 billion, far short of the \$100 billion revised target for 2030.

As the Saudi government seeks further sources of capital to fill the gap, we see three potential scenarios, with varying outcomes for the kingdom. Some external entities may pursue self-interested opportunism, in which they prioritize their own gains, possibly hindering the kingdom's objectives. Others will have mixed motivations and goals, so the kingdom's success will be determined by the balance of supportive versus self-interested collaborators. We see the best outcomes coming from the third option, collaborative

prosperity, in which aligned interests and long-term perspective yield successful collaboration that benefits the kingdom and all collaborators in the venture.

The Saudi government can increase the odds of collaborative prosperity by striving to ensure that collaborations meet five conditions. First, Saudi agencies and businesses will need clear selection criteria. Applying the criteria, in turn, will require thorough due diligence. Third, a regulatory framework will help the government safeguarding Saudi interests. Also, partnership agreements should establish risk-sharing arrangements. Finally, the Saudi government should regularly monitor and evaluate performance to assess the progress and impact of their projects.



9. "Saudi Arabia Records \$2.1 Bln FDI Inflows in Q2 2022," *Argaam*, November 15, 2022, <https://www.argaam.com>.



## Priority Moves to Achieve Vision 2030

Achieving the goals of Vision 2030 will require meeting four key priorities. The kingdom will need to attract sufficient foreign direct investment, which it can do by adopting practices used by China and India model, including proactive investment promotion and a streamlined regulatory framework. Second, it should nurture local champions by providing support programs for entrepreneurship and improving access to capital ; the recent experience of the United Arab Emirates offers relevant examples. The third priority is to foster ecosystem development by adapting the Silicon Valley approach: identifying priority industries, facilitating R&D and tech transfer, and building digital infrastructure. Fourth, the kingdom must enhance human capital development—emulating the success of South Korea by upskilling and reskilling programs, as well as promoting collaboration between industry and academia.

The Saudi government has crafted an impressive vision of its economic and social future, and domestic and foreign organizations already are taking important steps toward that vision. We expect to see further progress, but good counsel can increase the likelihood of fully realizing the vision. Getting this right should enable Saudi Arabia's people and businesses to thrive well into the twenty-first century.





# CHAPTER 1

## Saudi Arabia's Vision 2030



# Saudi Arabia's Vision 2030



In April 2016, the Kingdom of Saudi Arabia announced a plan aimed at opening up to greater interaction with the rest of the world. The broad set of economic and social reforms of Vision 2030 are intended to unlock the kingdom's full potential. On the economic front, the reforms are designed to reduce dependence on oil exports and usher in a new era of economic diversification and opportunity.<sup>10</sup> This chapter provides an overview of Vision 2030, followed by a deeper dive into the economic goals, especially as they pertain to the industrials sector.

## Why Vision 2030?

The creation of Vision 2030 followed economic swings that were intensified by the Saudi economy being heavily dependent on a significant but single natural resource: oil. A decade of prosperity came under threat when oil prices collapsed in 2014–15, and the kingdom's leadership recognized a need for transformation.

In 2003–13, Saudi Arabia's oil-dependent economy enjoyed unprecedented prosperity. The kingdom's oil industry posted incomes equal to 42% of GDP, provided 90% of export earnings, and contributed 87% of the kingdom's budget revenues.<sup>11</sup> During the decade's boom in oil prices, Saudi Arabia's GDP doubled, and the kingdom was the world's 19th-largest economy.

Then oil prices collapsed. The Saudi government reported a deficit in 2016—the first time since 2007. Financial reserves dwindled from \$732 billion at the start of 2015 to \$623 at year-end. To finance spending, the government was forced to issue bonds in the international markets.<sup>12</sup>

In light of the changing energy market, as well as demographic changes such as the growth of the kingdom's youth population, Crown Prince Mohammad bin Salman saw a need for a more diverse economy—one that invested more in finance, health care, manufacturing, mining, and tourism. He further recognized that social reforms also would be necessary to make the transformation possible.

10. "Opening Up to the World: Saudi Arabia's Tourism Goals," Entrepreneur Middle East, August 7, 2022 (part of Bringing the World to Saudi, a series sponsored by Saudia and developed in partnership with Lucidity Insights), <https://www.entrepreneur.com>.

11. Mohammed Nuruzzaman, "Saudi Arabia's 'Vision 2030': Will It Save or Sink the Middle East?," E-International Relations, July 10, 2018, <https://www.e-ir.info>.

12. Ibid.





The Vision’s Three Themes

Vision 2030 grows out of three themes: creating a vibrant society, developing a thriving economy, and ensuring an ambitious nation. For each theme, Vision 2030 defines objectives and areas to focus on (see Table 1). The vision also sets targets for various metrics, including the examples shown in Table 2.

Table 1

| Saudi Arabia’s Vision 2030: Three Themes             |                                                                                                                                             |                                                                                                                                 |                                                                                                                                  |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Theme                                                | Objectives                                                                                                                                  | Areas of Focus                                                                                                                  |                                                                                                                                  |
| <div>Creating a vibrant society</div> <div></div>    | <ul style="list-style-type: none"><li>Strengthen Islamic values and national identity</li><li>Offer a fulfilling and healthy life</li></ul> | <ul style="list-style-type: none"><li>Urbanism</li><li>Culture</li><li>Entertainment</li></ul>                                  | <ul style="list-style-type: none"><li>Sports</li><li>Umrah</li><li>UNESCO</li></ul>                                              |
| <div>Developing a thriving economy</div> <div></div> | <ul style="list-style-type: none"><li>Increase employment</li><li>Grow and diversify the economy</li></ul>                                  | <ul style="list-style-type: none"><li>Employment</li><li>Women in the workforce</li><li>International competitiveness</li></ul> | <ul style="list-style-type: none"><li>Public Investment Fund</li><li>Foreign direct investment</li><li>Non-oil exports</li></ul> |
| <div>Ensuring an ambitious nation</div> <div></div>  | <ul style="list-style-type: none"><li>Enhance government effectiveness</li><li>Enable social responsibility</li></ul>                       | <ul style="list-style-type: none"><li>Non-oil revenues</li><li>Government effectiveness</li><li>E-government</li></ul>          | <ul style="list-style-type: none"><li>Household savings and income</li><li>Nonprofits</li><li>volunteering</li></ul>             |

Source: “Opening Up to the World: Saudi Arabia’s Tourism Goals,” *Entrepreneur Middle East*, August 7, 2022, <https://www.entrepreneur.com>.



Table 2

## Selected Metrics and Targets for Realizing Vision 2030



| Theme                                    | Metric                                                                  | Baseline, 2016  | Target, 2030   |
|------------------------------------------|-------------------------------------------------------------------------|-----------------|----------------|
| <b>Creating a vibrant society</b><br>    | Number of Saudi cities recognized as in being world's top 100           | None            | 3              |
|                                          | Number of religious pilgrims (Umrah visitors) per year                  | 8 million       | 30 million     |
|                                          | Household spending on cultural and entertainment activities, % of total | 2.9%            | 6%             |
|                                          | Average life expectancy, years                                          | 74              | 80             |
|                                          | Rank in Social Capital Index                                            | 26              | 10             |
| <b>Developing a thriving economy</b><br> | Private-sector contribution to GDP, %                                   | 40%             | 65%            |
|                                          | Unemployment rate                                                       | 11.6%           | 7.0%           |
|                                          | Women's labor force participation rate                                  | 22%             | 30%            |
|                                          | Sovereign Wealth Fund Public Investment Fund (PIF)                      | SAR 600 billion | SAR 7 trillion |
|                                          | Foreign direct investment (FDI) as a share of GDP                       | 3.8%            | 5.7%           |
| <b>Ensuring an ambitious nation</b><br>  | Share of non-oil exports in non-oil GDP                                 | 16%             | 50%            |
|                                          | Rank in Government Effectiveness Index                                  | 80              | 20             |
|                                          | Nonprofit sector contribution to GDP                                    | <1%             | 5%             |
|                                          | Rank in E-Government Survey Index                                       | 36              | Top 5          |
|                                          | Number of individuals filling volunteer opportunities                   | 11,000          | 1 million      |

Source: Vision 2030, Kingdom of Saudi Arabia, [https://www.saudiembassy.net/sites/default/files/u66/Saudi\\_Vision2030\\_EN.pdf](https://www.saudiembassy.net/sites/default/files/u66/Saudi_Vision2030_EN.pdf).

### Creating a Vibrant Society

To create a vibrant society, Vision 2030 establishes two objectives: (1) strengthen Islamic values and national identity and (2) offer a fulfilling and healthy lifestyle. The plans for meeting these objectives focus on urbanism, culture, entertainment, sports, Umrah, and UNESCO World Heritage Sites.

The metrics for this theme reflect many aspects of what can make a society vibrant. Related to the first objective, one target is to raise the number of Saudi cities recognized as being among the world's top 100 from none to three. Another is to be able to welcome 30 million religious pilgrims each year, up from eight million in 2016. Examples of targets for a fulfilling and healthy lifestyle include 6 percent of household spending going to culture and entertainment (up from less than 3 percent in 2016), an increase in life expectancy from 74 years to 80, and a rise in Saudi Arabia's rank in the Social Capital Index from 26th place to 10th place.



## Developing a Thriving Economy

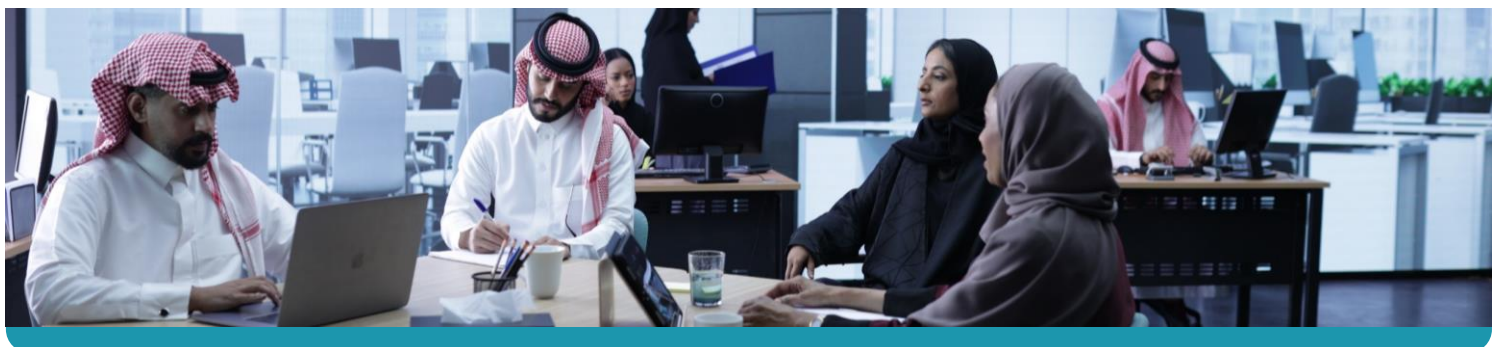
The objectives associated with developing a thriving economy are to increase employment and to grow and diversify the economy. Areas of focus include employment, women in the workforce, international competitiveness, the Saudi government's Public Investment Fund, foreign direct investment, and non-oil exports.

The economic metrics include such employment measures as the unemployment rate (targeted to decline from 11.6% in 2016 to 7.0% in 2030) and women's labor force participation rate (targeted to rise from 22% to 30%). Other metrics involve diversification and growth of the economy. Vision 2030 calls for the private sector's contribution to GDP to rise from 40% in 2016 to 65% in 2030 and for Saudi Arabia's Public Investment Fund to grow from 600 billion Saudi riyals to 7 trillion riyals. Some metrics focus on international trade: the target for foreign direct investment (FDI) as a share of GDP is 5.7% (up from 3.8% in 2016), and the target for non-oil exports as a share of non-oil GDP is 50% (up from 16% in 2016).

## Ensuring an Ambitious Nation

For ensuring an ambitious nation, Vision 2030's objectives are to enhance government effectiveness and enable social responsibility. Areas of focus on non-oil revenues, government effectiveness, e-government, household savings and income, nonprofits, and volunteer work.

The Vision 2030 metrics assess government effectiveness as the kingdom's rank among nations in the World Bank's Government Effectiveness Index. Saudi Arabia ranked 80 in 2016 and has set a target of rising to 20th place by 2030. In the area of social responsibility, metrics include the nonprofit sector's contribution to GDP, targeted to rise to 5% in 2030 (versus less than 1% in 2016) and the number of individuals performing volunteer service with nonprofits (a target of 1 million, up dramatically from 11,000 in 2016). Vision 2030 also calls for Saudi Arabia to achieve a top-five ranking in the UN's E-Government Survey, up from 36 in 2016.







## Programs to Enable Transformation

To pave the way for achieving this vision of Saudi Arabia's future, the kingdom has launched six transformative programs:<sup>13</sup>



1

### Government Restructuring Program

This program is eliminating supreme councils and establishing the Council of Political and Security Affairs and the Council of Economic and Development Affairs. Its reforms are helping to speed strategy development and decision making, as well as enhance performance.

2

### Strategic Directions Program

This program entails a review of existing roles of government agencies to align them with future economic and social needs. Decisions are based on detailed studies and benchmarks, as well as comprehensive analysis of each agency's programs, plans, and relevant performance indicators.

3

### Fiscal Balance Program

This program involves examining existing capital expenditures, their approval mechanism, and their measurable economic impact. Committees and new departments are tasked with reviewing relevant regulations and taking action on expenditures. As a result of this work, non-oil revenues increased by 30 percent in 2022.

13. Vision 2030, Kingdom of Saudi Arabia, accessed at <https://www.vision2030.gov.sa>.



#### 4 Project Management Program

Multiple agencies of the kingdom are undergoing a wave of reforms and transformation. Project management offices (PMOs) have been established in the Council of Economic and Development Affairs and many other government agencies to manage the efforts and ensure coordination. The Project Management Program also set up a central delivery unit.

#### 5 Regulations Review Program

This program engages in continuous review of current and newly enacted laws to ensure they align with the kingdom's priorities. Key examples include the company law, the non-governmental organizations' law, the law concerning fees on unused lands, and the general authority for endowments (Awqaf) law.

#### 6 Performance Measurement Program

This program leverages performance measurement in the evaluation of all government agencies, their programs, initiatives, and executives. The Center for Performance Management of Government Agencies is charged with institutionalizing the efforts for the long term. Performance dashboards will promote accountability and transparency.



Alongside these transformative programs focused on processes, Saudi Arabia launched Vision Realization Programs to begin making progress toward the vision in key industries, economic needs, and quality-of-life measures.<sup>14</sup> To support economic transformation, the privatization program works to strengthen the role of the private sector by unlocking state-owned assets for investment and privatize selected government services to improve the quality of services and reduce overall costs. The human capability development program seeks to prepare Saudi citizens for the job market and global competition and develop skills, knowledge, and values that enhance the 21st century and their global citizenship.

Industries that are the focus of Vision Realization Programs include the finance, health, tourism (specifically, for the Hajj and Umrah pilgrimages), industrials, and logistics sectors. The financial sector development program aims to develop a diversified and effective financial sector to support the development of Saudi Arabia's economy, diversify its sources of income, and stimulate savings, finance, and investment. The health sector transformation program is charged with restructuring the health sector in Saudi Arabia to be a comprehensive, effective, and integrated health system based on the health of the individual and society, applying the principle of value-based care.

The pilgrim experience program aims to enrich and deepen the Hajj and Umrah experience through the provision of exceptional services at all stages of their journey. The national industrial development and logistics program is transforming Saudi Arabia into an Industrial Powerhouse and a global logistics hub by leveraging the resources of sectors like mining and energy and focusing on the development of local content as well as Industry 4.0. For more on this program, see “Focus on the National Industrial Development and Logistics Program.”



14. “Vision Realization Programs,” Kingdom of Saudi Arabia, <https://www.vision2020.gov.sa/v2030/vrps>.





Other Vision Realization Programs address various societal and economic needs and the government's role. The fiscal sustainability program aims to improve government performance through spending efficiency, revenue growth, and risk management. The housing program works on providing housing solutions that meet the needs and aspirations of Saudi families, with a focus on sustainability and technology. The national transformation program aims to achieve governmental operational excellence, improve economic enablers, and enhance living

standards by accelerating the implementation of primary and digital infrastructure and engaging stakeholders. The public investment fund program is driving economic diversification in Saudi Arabia through strategic international and domestic investment. And the quality-of-life program is charged with improving individuals' lifestyles by developing an ecosystem to support and create new options that boost citizens' and residents' participation in cultural, environmental, and sports activities.

## National Industrial Development and Logistics Program

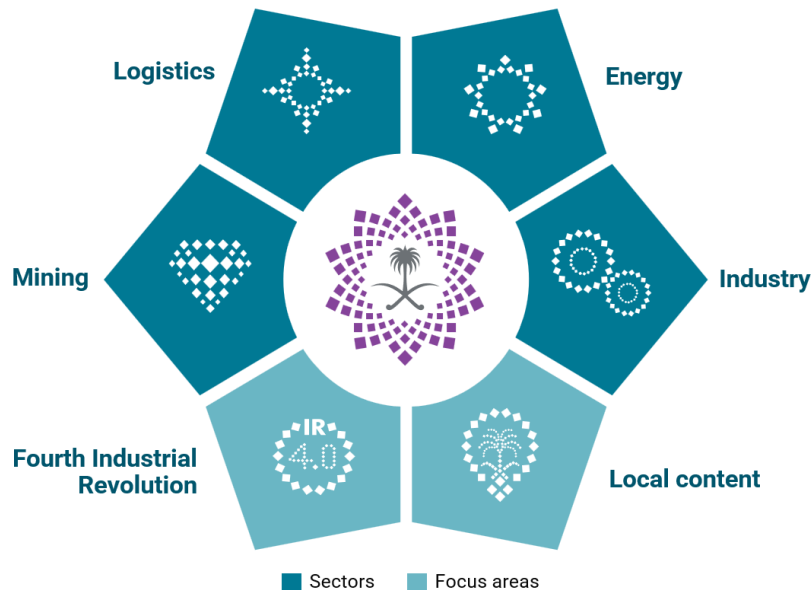
The National Industrial Development and Logistics Program aims to transform Saudi Arabia into an industrial powerhouse and a global logistics hub by maximizing the value of its mining and energy sectors while unlocking the full potential of local content and the Fourth Industrial Revolution (also known as Industry 4.0).

The program focuses on enhancing enablers that would contribute to strengthening the private sector participation and impact in all NIDLP sector. The key enablers include financial enablement, infrastructure development, and legal and regulatory reform. Exhibit 1 shows the four industry sectors and two focus areas covered by this program.



Exhibit 1

## Sectors and Focus Areas of the National Industrial Development and Logistics Program (NIDLP)



Source: "National Industrial Development and Logistics Program," Kingdom of Saudi Arabia, <https://www.vision2030.gov.sa/v2030/vrps/nidlp/>.

The program has objectives related to each of the sectors and focus areas:

- **Energy.** Increase gas production and distribution capacity. Increase the contribution of renewable sources in the energy mix. Promote the competitiveness of the energy sector.
- **Mining.** Maximize the value of the mining industry.
- **Industry.** Develop oil-and-gas-adjacent industries. Localize promising manufacturing industries. Localizing the military industries. Create special zones and rehabilitate cities.
- **Logistics services.** Create and improve the performance of logistic hubs. Improve the local, regional, and international connectivity of trade and transport networks.
- **Local content.** Increase the localization of the oil-and-gas sector. Increase the local content in non-oil sectors.



## National Industrial Strategy

To accelerate and diversify the kingdom's industrial development journey, Saudi Arabia's crown prince launched the National Industrial Strategy (NIS) in 2022.<sup>15</sup> The NIS is a comprehensive road map that includes 118 segments selected within 12 priority industrial subsectors. These subsectors are aerospace, automotive, building materials, food processing, maritime, medical devices, four metals industries (aluminum, copper, steel, and titanium), plastic and rubber manufacturing, and specialty chemicals.



1

Build national industrial resilience through know-how and manufacturing capabilities to tackle global uncertainties.

2

Become an integrated regional manufacturing hub by leveraging local and regional markets and enhancing competitiveness in value chains and related products.

3

Expand global leadership in selected segments by adopting Fourth Industrial Revolution technologies and focusing on research, development, and innovation.

The strategy is expected to have a significant impact. GDP is forecast to grow by a factor of 2.7 from 2020 to 2030 and by a factor of 4.3 between 2020 and 2035. This will be accompanied by the creation of 2.1 million direct and indirect industrial jobs. And exports of manufacturing goods are expected to triple between 2020 and 2030, reaching more than \$140 billion.



15. "Access Alert: Introducing Saudi Arabia's National Industry Strategy (NIS)," Access Partnership, November 14, 2022, <https://accesspartnership.com>.





## Public Investment Fund Program

The economic catalyst for Vision 2030 is Saudi Arabia's sovereign wealth fund, the Public Investment Fund (PIF). The PIF Program aims to transform this fund into an investment powerhouse. The program mandates that the PIF realize Vision 2030's second pillar, "thriving economy," by focusing on the economy's growth and diversification.

To kick-start the transformation of the fund, in 2015, the Saudi Council of Ministers issued a resolution to transfer oversight of the PIF from the Ministry of Finance to the Council of Economic and Development Affairs (CEDA). Two years later, CEDA launched the PIF Vision Realization Program, which joined forces with other VRPs to contribute to the kingdom's economic and social growth, further its global position, and uncover its pioneering investment power.

The PIF Program has delivered some noteworthy achievements.<sup>16</sup> As of year-end 2022, the fund had tripled its assets under management (Exhibit 2). In phase 1 of the program, 2018–20, PIF created several private-sector champions—22 companies spread across 10 industries (Exhibit 3).



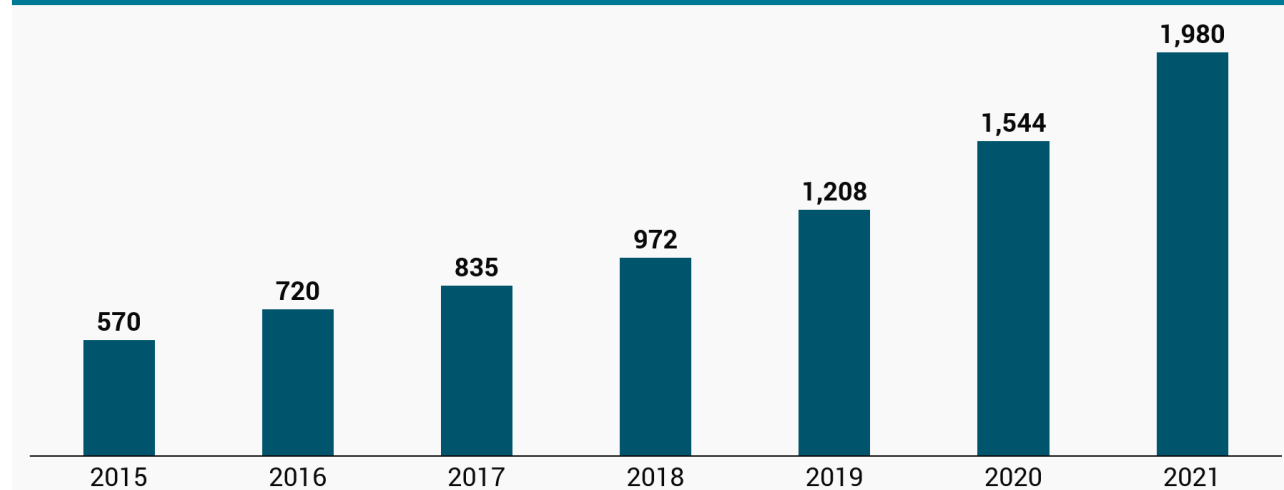
16. Public Investment Fund Program, 2021–2025, Kingdom of Saudi Arabia, <https://www.pif.gov.sa>.



Exhibit 2

From 2015 to 2021, Saudia Arabia's Public Investment Fund (PIF) increased its assets under management (AUM) by 4x.

AUM, 2015–21, billion Saudi riyals



Source: Public Investment Fund Program, 2021–2025, Kingdom of Saudi Arabia, <https://www.pif.gov.sa>.

Exhibit 3

In phase 1 of the PIF Program (2018–20), PIF established 22 companies in 10 diverse industries.



Source: Public Investment Fund Program, 2021–2025, Kingdom of Saudi Arabia, <https://www.pif.gov.sa>.



## During that period, PIF also launched two international investment pools:

### International Strategic Investments.

This initiative has already invested in companies based in several countries. It committed \$45 billion to SoftBank Vision Fund, the largest tech-focused investment fund, which focuses on Internet of Things, artificial intelligence, healthtech, and fintech. It pledged \$20 billion to Blackstone's colossal US infrastructure program, revolutionizing modernization efforts. It signed a deal with the Russian Direct Investment Fund to inject \$2 billion into Saudi-Russia joint projects spanning infrastructure, manufacturing, logistics, and retail. It pledged \$10 billion to invest in Brazil, committing to two funds in private equity and infrastructure. It invested \$3.5 billion in Uber Technologies, a global leader in the transportation and technology sectors.

It signed a \$2 billion memorandum of understanding with AFIC to invest in eight French private-equity funds. It purchased a 2.32% stake in Jio Platforms, India's telecom giant, for \$1.5 billion and a 2.04% stake in India's biggest retailer, Reliance Retail, for \$1.3 billion. It invested in Lucid Air's luxury-sedan launch at its Casa Grande factory. It acquired 55% of AccorInvest, a French hotel company focused mainly on Europe. It backed telemedicine company Babylon, which provides accessible health care worldwide using advanced technology. And it is a major investor in Magic Leap, a US technology company focused on augmented reality.



### International Diversified Pool.

This initiative has solidified ties with asset managers and banks, becoming a major player in diverse investments. It commits to various global fund managers across asset classes, amassing significant investments worldwide in equities, credit, real estate, and infrastructure.





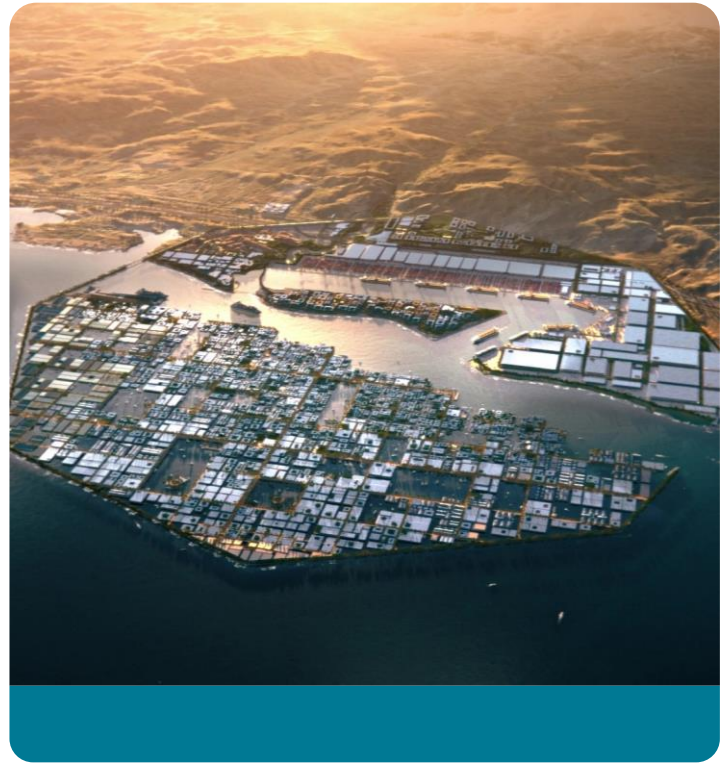
## Giga Projects

Another part of implementing Vision 2030 is a series of large-scale development initiatives, known as Giga Projects. Currently, four such projects are under way: a sustainable city called Neom; a luxury tourism project called Amaala; another tourism project, the Red Sea Project; and a cultural development project known as Diriyah Gate.<sup>17</sup>

### Neom

The flagship project is Neom, a planned megacity covering 26,500 square kilometers in the northwest of Saudi Arabia along the coast of the Red Sea. The concept is that Neom will be a sustainable and forward-looking green city built from scratch, powered by renewables, and driving tech, innovation, and tourism. Futuristic infrastructure will include high-speed transport, next gen port and integrated supply chain , and advanced health care.

Neom is expected to cost roughly \$500 billion, to be funded by the Saudi government and private investors. The first phase of the project is expected to be completed by 2025, and full development of the city is scheduled to finish by 2030.



### Amaala

The luxury tourism project called Amaala also is located along the northwest coast of Saudi Arabia on the Red Sea. It is designed to be a luxury destination for discerning travelers seeking exclusivity, wellness, and cultural experiences. Amaala is being developed by the Saudi government's Public Investment Fund. The first phase is expected to be completed in 2023.



17. Eid Dalbani, "KSA's Giga Projects to Look Out For," LinkedIn, March 8, 2023, <https://www.linkedin.com>.



## The Red Sea Project

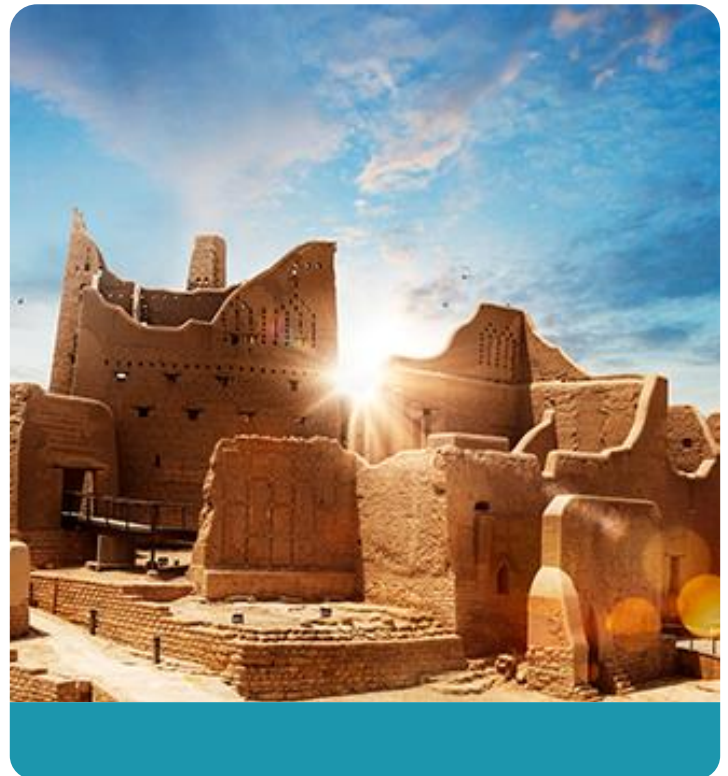
Situated along Saudi Arabia's western coast around the Red Sea, the Red Sea Project is a tourism project covering an area of more than 28,000 square kilometers. Plans call for it to be a luxury travel destination offering a blend of nature, culture, and adventure. The project is to feature luxury hotels, resorts, and villas, along with diverse dining, shopping, spas, and water sports centers. The first phase is expected to be completed by the end of 2024.



## Diriyah Gate

The Diriyah Gate cultural heritage development project covers an area of more than seven square kilometers. It is intended to preserve and showcase the cultural heritage of Diriyah, the birthplace of the Saudi state. The project involves the restoration of more than 100 historic buildings and sites and is targeting 27 million local and international visitors by 2030.

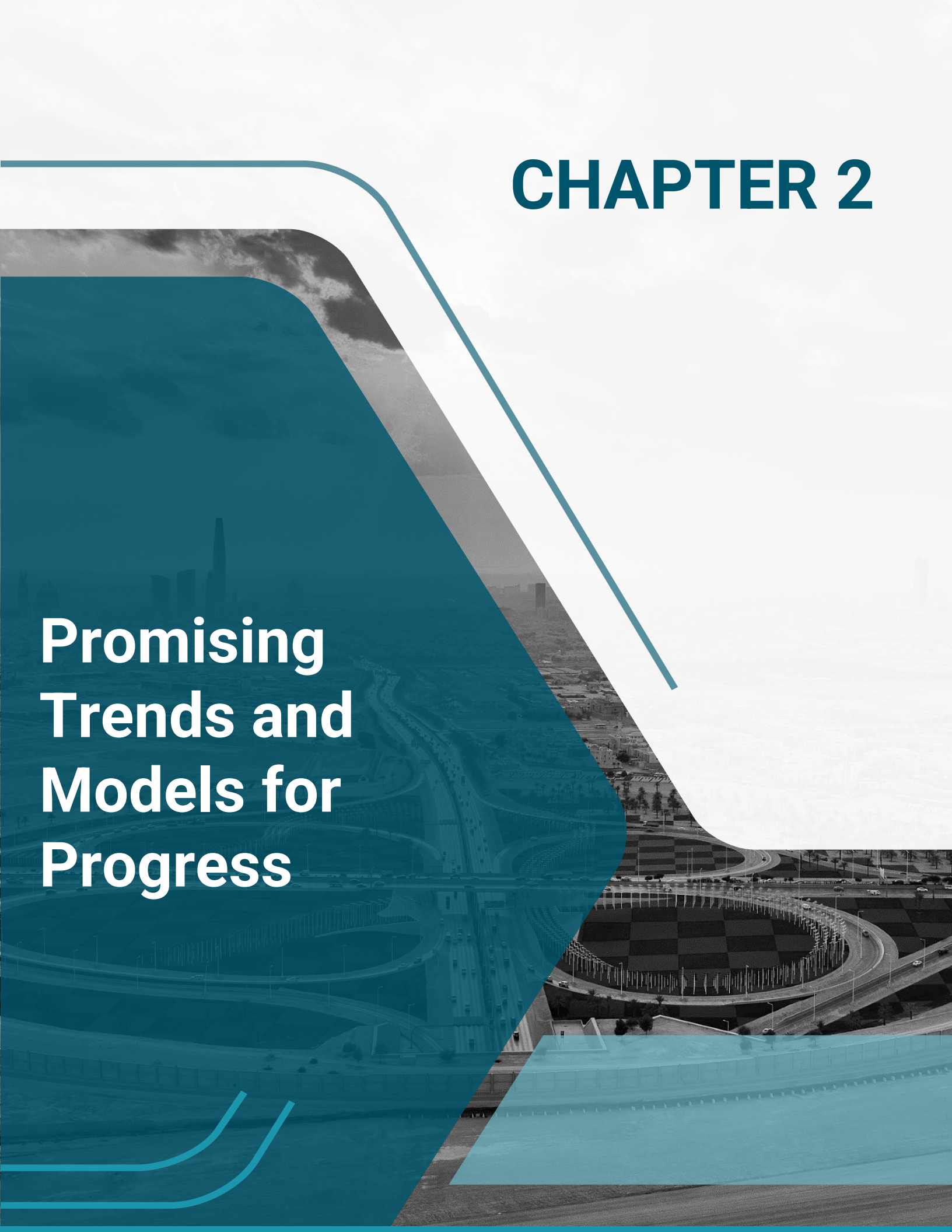
The Saudi Vision 2030 is one of a more diverse economy, enabled by social reforms, which create a vibrant society, a thriving economy, and an ambitious nation. Vision 2030 defines objectives and focus areas, and the kingdom has established transformative programs and Vision Realization Programs in key industries, economic needs, and quality-of-life measures, as well as large-scale development initiatives known as Giga Projects. These significant efforts have enabled the kingdom to make progress in the early years of pursuing the vision. To sustain the progress, the Saudi government can adapt ideas from earlier economic transformations, as described in the next chapter.





# CHAPTER 2

## Promising Trends and Models for Progress





# Promising Trends and Models for Progress



Reports on the progress toward Vision 2030 indicate early signs of success, along with potential to embrace examples provided by transformation efforts in other locales, including China, the United Arab Emirates, and Western Europe.

## Early Markers of Progress

The early successes of Saudi Arabia's economic and social transformation touch on all three themes of Vision 2030.<sup>18</sup>

### Progress toward a Vibrant Society

On the theme of a vibrant society, the evidence points to improving conditions for residents and guests of the kingdom. The rate of home ownership surged from 47% in 2016 to 60% in 2020. Over the same period, life expectancy rose from 74.8 years to 75.3, and the number of deaths from road accidents fell 55 percent, likely related to investments in road infrastructure. The World Bank's 2020 *Women, Business and Law Report* (an index on life cycle of working woman) gave Saudi Arabia a 10-point increase, to 80 out of 100 possible points.

In 2021, Saudi Arabia welcomed 67 million visitors, a number that highlights the tourism sector's potential as an economic driver. The quality of visits is improving, too. The launch of the Haramain high-speed train, which connects Jeddah Airport with Makkah and Madinah, has eased transportation for pilgrims.



18. Statistics in this section drawn from "Vision 2030: A Story of Transformation," Kingdom of Saudi Arabia, <https://www.vision2030.gov.sa>.



## Progress toward a Thriving Economy

Saudi Arabia is making strides toward better opportunities for workers. The percentage of organizations compliant with standards for occupational safety and health rose from 15% in 2015 to 65% in 2022. And the kingdom is preparing young people for success: on the UNDP's Technical and Vocational Training Index for countries worldwide, Saudi Arabia ranked ninth. Women, too, are finding opportunities, as evidenced by a sharp increase in female labor force participation, which reached 35.6% in 2021 (up from 19.4% in 2016).

Other economic metrics are trending in a favorable direction. Assets under management of the Public Investment Fund nearly tripled from 2016 to 2020, reaching about \$400 billion. Its total global assets surged from 5% to 31% in 2020. Economic diversification also improved, increasing 122% from \$44 billion in 2015 to \$107 billion in 2021. And according to the Digital Riser Report, Saudi Arabia has the second greatest digital competitiveness among the nations of the G20.

## Progress toward an Ambitious Nation

In the business world and society at large, Saudi Arabia is showing its ambition to thrive economically and socially. The industrial city of Yanbu joined UNESCO's Global Network of Learning Cities, based on its promotion of lifelong learning and empowerment of individuals of all ages. The Game Founders Program allocated \$265,000 to support 100 Saudi game developers and accelerate the launch of their games. And the Najiz portal digitized 160 judicial services, thereby benefiting more than 38 million users.

In their work and beyond, Saudis are endeavoring to help their communities thrive. From 2016 to 2021, volunteerism increased by a factor of 14, reaching 484,000 volunteers. In a sign of strength in medical services, the SEHA Virtual Hospital, launched in 2022, now delivers 34 specialized services across 130 linked hospitals, making it the world's biggest virtual hospital. And the 2020–21 Global Entrepreneurship Model ranked Saudi Arabia in first place for government's and entrepreneurs' response to COVID-19.



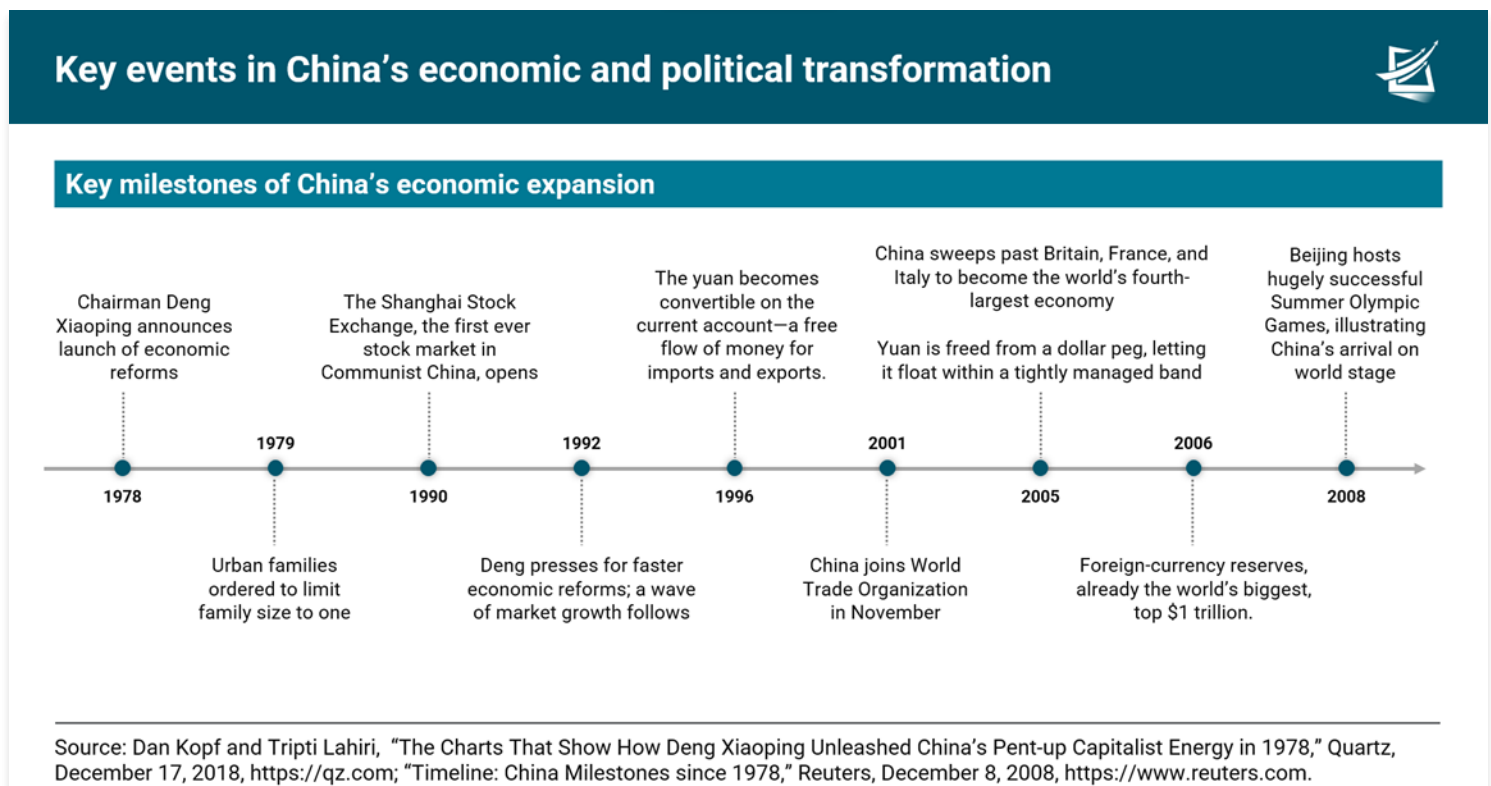


## Role Models for Transformation

While Saudi Arabia's accomplishments are already notable, the Vision 2030 plan has ambitious goals. The kingdom may be able to limit setbacks and meet or exceed targets by learning from the experiences of other governments leading transformative development efforts. In the years following World War II, for example, the countries of Western Europe built economic and political cooperation that has strengthened the continent's economies for generations. Much more recently, the United Arab Emirates in 2010 kicked off a plan to become ranked among the "best countries in the world."

All those examples merit further study; however, China stands out for the scope of its economic progress in recent years. In 1978, China set out to eradicate extreme poverty within 50 years. It has come close. During the four decades following 1978, China's average GDP growth averaged 9.5%—a rate the World Bank described as the "fastest sustained expansion by a major economy in history." It reduced the share of the population in extreme poverty from 90% in 1981 to 2% in 2013, and by 2015, it had lifted 800 million people out of poverty. As of 2012, the World Bank recognized China's economy as an upper-middle-income economy.<sup>19</sup> Exhibit 4 lays out some milestones along that journey.

### Exhibit 4



19. Wayne M. Morrison, "China's Economic Rise: History, Trends, Challenges, and Implications for the United States," report no. RL33534, Congressional Research Service, July 12, 2006–June 25, 2019, accessed at EveryCRSReport.com, [https://www.everycrsreport.com/reports/RL33534.html#\\_Toc12530866](https://www.everycrsreport.com/reports/RL33534.html#_Toc12530866).





What has China done right? While every country has its own set of circumstances and norms, some government actions seem directly related to measurable economic and social progress. From 1978 to 1984, for example, China implemented agricultural reforms and market liberalization that were followed by increased grain output, a resolution of food shortages, and a boost to farmers' incomes. In the 1985–92 period, a significant economic expansion followed the opening of coastal cities and Special Economic Zones to invite greater trade growth and foreign direct investment.



In the 1990s, the restructuring of state-owned enterprises improved efficiency and profitability. However, income inequality rose as well. The Chinese government responded with various social security systems that aided millions of workers, although it remains incomplete. And in 2001, China joined the World Trade Organization, which provided an impetus for domestic reforms and also sparked significant growth in exports, job creation, and incomes.

These and other initiatives bear study to see which may be appropriate for adapting to the Saudi context. A helpful analysis for deciding where to focus is a recent report from the UN Conference on Trade and Development. The 2022 report, titled *China's Structural Transformation: What Can Developing Countries Learn?* points to four factors as most significant. These are China's macroeconomic and financial fundamentals, focus on driving rapid industrialization, participation in global value chains, and transformation into a digital economy (see Exhibit 5).



## Exhibit 5

## Four key factors behind China's successful transformation since 1978



### 1. Strong macroeconomic and financial fundamentals

- Adaptive fiscal and monetary policies
- Gradual trade and capital liberalization
- Public investment as a countercyclical economic booster
- Multi-tier banking system

### 2. Focus on rapid industrialization

- Tech and innovation: R&D investments and policies for protecting intellectual property
- Human capital (educated workforce, training of skilled labor)
- Attraction of foreign direct investment (FDI)

### 4. Transformation into a digital economy

- Digital policy (infrastructure, integration, and sector-specific policies driving national modernization)
- Successful implementation (regulatory framework, digital infrastructure investments, support for domestic tech companies, and digital talent development)

### 3. Participation in global value chains

- Inward FDI to modernize domestic industries
- Global value chain expansion
- Industry focus adjustment to attract FDI in manufacturing and high-tech sectors

40+  
years of  
China's  
reforms

Source: China's Structural Transformation: What Can Developing Countries Learn?, UN Conference on Trade and Development, 2022, [https://unctad.org/system/files/official-document/gds2022d1\\_en.pdf](https://unctad.org/system/files/official-document/gds2022d1_en.pdf).

Applying this analysis, we see five lessons that Saudi Arabia might take from China's successes in economic reform:



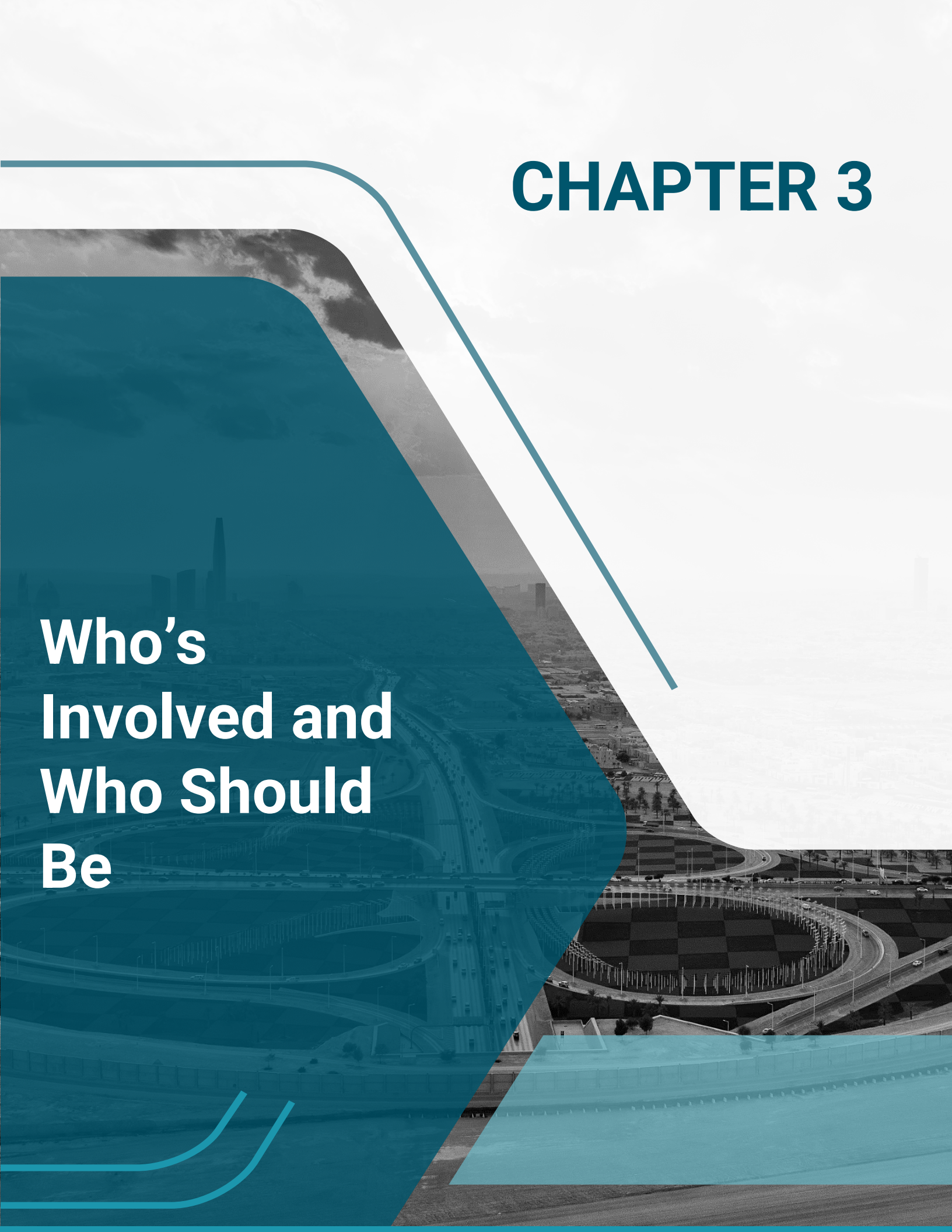
- 1 Long-term vision and adaptability.** Set clear goals with adaptive fiscal and monetary policies.
- 2 Digital transformation.** Establish comprehensive policies, robust regulations, and infrastructure investments.
- 3 Rapid industrialization.** Emphasize R&D, a skilled workforce, and attracting FDI (e.g., with tax incentives and streamlined regulations).
- 4 Going-global strategy.** Seek significant inflows of FDI, invest overseas to gain access to additional resources and markets, and shift focus to industries that can help attract foreign investors.
- 5 Win-win partnerships.** Apply rigorous criteria and due diligence to find the right external partners.

The next chapter will take a closer look at pursuing and implementing win-win partnerships.



# CHAPTER 3

**Who's  
Involved and  
Who Should  
Be**





# Who's Involved and Who Should Be

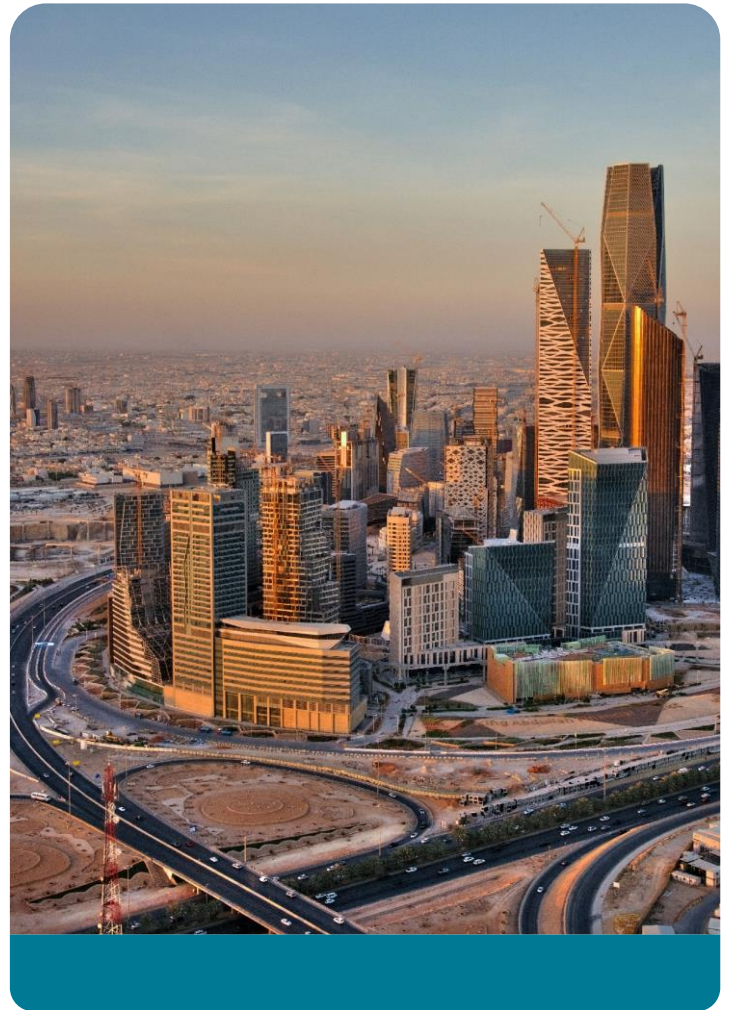


Since the announcement of Vision 2030, multiple countries have made moves supporting and collaborating with Saudi Arabia. In addition, companies involved in a variety of industries have begun to explore partnerships with and business opportunities within the kingdom.

## Government Support and Collaboration

Among the countries interested in participating in Saudi Arabia's transformation, five that have taken significant steps are China, France, Japan, Korea, and the United Kingdom.

China not only serves as an example for economic and social transformation (as described in the previous chapter) but also has been a major trading partner with and investor in Saudi Arabia. In 2022, the kingdom reclaimed its spot as the largest oil supplier to China, and overall trade of goods between the two countries increased by 32.9% to \$116 billion.<sup>20</sup> In March 2023, Saudi Aramco took a \$3.6 billion stake in Rongsheng Petrochemical to expand its downstream presence in China.<sup>21</sup> Venture capital investor eWTP Arabia Capital, backed by the Saudi Public Investment Fund (PIF) and Alibaba, has made more than 16 investments totaling \$320 million in the cloud and digital sector since 2019.<sup>22</sup>



20. "Chinese Firms Flock to Saudi Arabia in Middle East Gold Rush," *ThinkChina*, May 12, 2023, <https://www.thinkchina.com>.

21. "Aramco to Expand Presence in China by Acquiring 10% Stake in Rongsheng Petrochemical," news release, Aramco, March 27, 2023, <https://www.aramco.com>.

22. "Chinese Firms Flock to Saudi Arabia in Middle East Gold Rush," *ThinkChina*, May 12, 2023, <https://www.thinkchina.com>.



Table 3

## China's economic engagement with Saudi Arabia



| Industry                          | Saudi Entity                                          | Chinese Entity                        | Nature of Collaboration                                                                                                                                                           |
|-----------------------------------|-------------------------------------------------------|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Energy                            | ACWA POWER<br>أكوا باور                               | 9 companies <sup>1</sup>              | • <b>Clean-energy agreement:</b> Financing, investment, and construction of ACWA Power's clean and renewable energy projects, signed in Dec. 2022                                 |
|                                   | شركة الكهرباء<br>Almawad Holding Co.                  | CGN                                   | • <b>Diversified energy projects:</b> Memorandum of understanding signed Dec. 2022 for joint development of 10 gigawatts of renewable and thermal energy projects                 |
|                                   | aramco                                                | 丝路基金<br>Silk Road Fund                | • <b>Investment in Aramco Gas Pipeline Co.:</b> In Feb. 2022, Silk Road Fund and China Merchants invested \$4.6 billion as part of a \$15.5 billion leasing deal led by BlackRock |
|                                   | سمو<br>SUMOU                                          | Enovate<br>in Alser Solutions company | • <b>Electric-vehicle (EV) plant:</b> Agreement to establish Saudi Arabia's first EV plant                                                                                        |
| Technology and telecommunications | N/A                                                   | HUAWEI                                | • <b>Expanding presence:</b> Increased Huawei's presence in 5G and smart cities                                                                                                   |
|                                   | الشركة السعودية للكهرباء<br>Saudi Electricity Company | 中国铁塔集团<br>CHINA TOWER GROUP           | • <b>Fiber optic services partnership:</b> CCS Limited supplies fiber optic services to Saudi Electric Company and Saudi Telecom firms                                            |
|                                   | N/A                                                   | Alibaba<br>Tencent 腾讯                 | • <b>Cloud services partnerships:</b> Capitalizing on Saudi Arabia's reform and opening, particularly in cloud services and AI                                                    |
| Infrastructure                    | رافال<br>RAFAL                                        | 中信建设<br>CHINA CITIC CONSTRUCTION      | • <b>Real estate joint venture:</b> Partnership to construct 20,000 residential apartments in Riyadh under a \$3.5 billion contract signed in Sept. 2022                          |
|                                   | N/A                                                   | 中国电建<br>CHINA POWER<br>SUNGROW        | • <b>Neom project:</b> Participation in the construction and energy storage aspects of the Neom megacity project                                                                  |

1 Bank of China, China Energy International Group, China Southern Power Grid International, Industrial and Commercial Bank of China, Jinko Solar Co, Jolywood Solar Technology Co, Power China International Group, SPIC Huanghe Hydropower Development Co, and Sungrow Power Supply Co.

France is notable for its financial assistance. Its direct investments of \$4.4 billion make the French government the largest investor in Saudi Arabia.<sup>23</sup> France also entered into a long-term partnership—an intergovernmental agreement in April 2018 on development and transformation of the AlUla region into a world-class cultural and tourism destination.<sup>24</sup> France also collaborates on digital transformation; localization of materials, products, and services related to the energy sectors; joint research; and skill training.

Japan and Saudi Arabia in 2017 formulated Saudi-Japan Vision 2030, a strategic partnership aimed at achieving mutual socioeconomic visions through synergy and collaboration.<sup>25</sup>

23. Zaid Khashoggi, "Saudi Arabia, France Strengthen Business, Trade Relations in Line with Vision 2030 Investment Plans," *Arab News*, June 1, 2021, <https://www.arabnews.com>.

24. The French Agency for AlUla Development (AFALULA) Welcomes the Signing of a Major Strategic Partnership between the Royal Commission for Alula (RCU) and the Leading French Engineering Group Bouygues Construction for the Construction Management of the Architectural Masterpiece Designed by Jean Nouvel in the Sharaan Nature Reserve in AlUla," AFALULA, June 7, 2023, <https://www.afalula.com>.

25. Rashid Hassan, "Saudi-Japanese Vision 2030 Heralds New Era in Relations, Says Ambassador," *Arab News*, June 29, 2019, <https://www.arabnews.com>.



Korea is backing a Saudi nuclear energy program with assistance through infrastructure development, feasibility studies, and professional training. In the area of education and research, Korea consults on policy for K–12 and higher education in Saudi Arabia. In addition, the Korea Development Institute (KDI) and the Center for Strategic Development (CSD) are cooperating on research and programs.<sup>26</sup>

The crown prince of Saudi Arabia and the UK's prime minister launched the annual UK-Saudi Strategic Partnership Council on March 7, 2018. Its objective is to be a key mechanism for advancing all aspects of the bilateral relationship, including UK support for Saudi Arabia's Vision 2030.<sup>27</sup>

## Private-Sector Involvement

Global corporations have been forging business partnerships with Saudi Arabia in multiple industries (Table 4). Some of the most significant partnerships are in energy, technology and telecommunications, infrastructure, health care, and financial services (Table 4).

Table 4

### Examples of global companies forging business partnerships with Saudi businesses



| Sector                            | Initiatives                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Companies                                                                |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Energy                            | <ul style="list-style-type: none"> <li>Partnership with Aramco to invest in alternative fuels, carbon capture, hydrogen and natural gas, transportation, and energy storage</li> <li>Global renewable-energy companies investing in solar and wind power projects in Saudi Arabia</li> </ul>                                                                                                                                                                                          | EIG<br>ACWA POWER<br>Masdar                                              |
| Technology and telecommunications | <ul style="list-style-type: none"> <li>Tech giants partnering with the Saudi government to create digital capability centers and innovation hubs for tech start-ups</li> <li>Communication technology companies working with STC, Mobily, and Zain Saudi Arabia to expand and enhance Saudi telecommunications networks, including 5G technology</li> </ul>                                                                                                                           | amazon<br>Microsoft<br>ORACLE<br>CISCO<br>IBM<br>Qualcomm<br>etisalat    |
| Infrastructure                    | <ul style="list-style-type: none"> <li>Infrastructure project contracts being awarded to global construction companies, e.g.: <ul style="list-style-type: none"> <li>Neom (a special economic zone) selected Bechtel for executive project management for its urban development project</li> <li>A joint venture of Vinci Construction UK and Al Muhaidib Contracting (AMC) won two separate contracts in Jeddah with the Saudi Arabian National Water Company</li> </ul> </li> </ul> | BECHTEL<br>VINCI                                                         |
| Health care                       | <ul style="list-style-type: none"> <li>US and European pharma companies partnering with Saudi health care organizations to invest in research, development, and production of medicines and medical devices.</li> <li>US-based health care providers collaborating with Saudi hospitals and institutions to enhance services, knowledge exchange, and medical education.</li> </ul>                                                                                                   | Pfizer<br>sanofi<br>gsk<br>Cleveland Clinic<br>JOHNS HOPKINS MEDICINE    |
| Financial services                | <ul style="list-style-type: none"> <li>In 2021, multiple foreign lenders obtained banking licenses to operate in Saudi Arabia</li> <li>Multiple foreign banks have set up full operations</li> </ul>                                                                                                                                                                                                                                                                                  | J.P.Morgan<br>Deutsche Bank<br>BNP PARIBAS<br>Standard Chartered<br>citi |

26. *Saudi Korean Vision 2030*, Korea Ministry of Trade, Industry and Energy, n.d., accessed at [mofa.go.kr](https://mofa.go.kr).

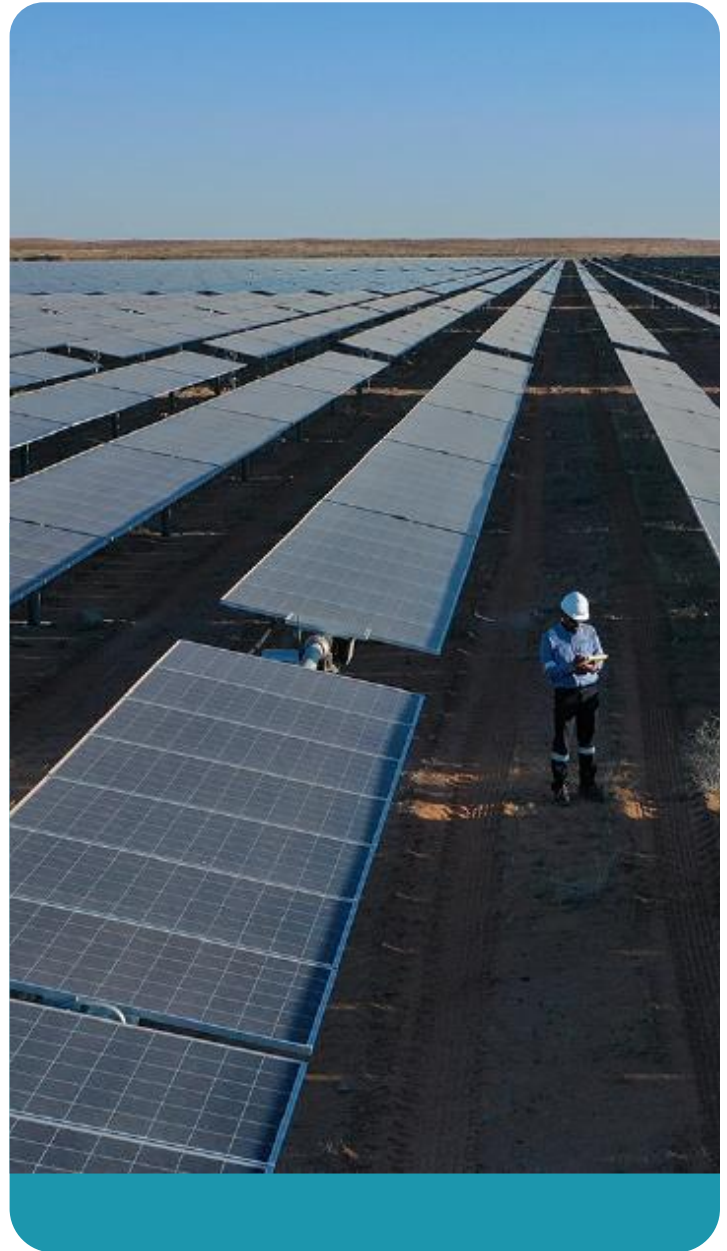
27. "United Kingdom–Saudi Arabia Joint Communiqué," news release, UK Foreign & Commonwealth Office, March 10, 2018, <https://www.gov.uk>.





In energy, EIG Global Energy Partners and Aramco are partnering to invest in alternative fuels, carbon capture, hydrogen and natural gas, transportation, and energy storage. Global renewable-energy companies are investing in solar and wind power projects in Saudi Arabia, supporting the kingdom's renewable-energy goals.<sup>28</sup>

In technology and telecommunications, tech giants have worked in partnership with the Saudi government to create digital capability centers and innovation hubs for tech start-ups.<sup>29</sup> Communication technology companies are working with STC, Mobily, and Zain Saudi Arabia to expand and enhance the kingdom's telecommunications networks, including 5G technology.<sup>30</sup> A leader in partnering with Saudi businesses is General Electric, which has been negotiating key technology agreements, as well as other partnerships in manufacturing and health care (Table 5).<sup>31</sup> And Samsung has a nonbinding memorandum of understanding (MOU) that sets forth preliminary plans for a strategic collaboration that would localize an industrial 5G technology ecosystem, starting with private networks, in Saudi Arabia.



28. Saudi Arabia and the UAE leading the region's renewable energy charge: S&P Global Ratings," *Arab News*, March 3, 2023, <https://www.arabnews.com>.
29. Divsha Bhat, "Saudi Announces \$1.2bn Tech Initiatives, Including All-New LEAP and @Hack Events," *Gulf Business*, August 25, 2021, <https://gulfbusiness.com>.
30. "5G and Other Innovative Technologies to Encourage ICT Growth in Saudi Arabia," in *The Report: Saudi Arabia 2020*, Oxford Business Group, <https://oxfordbusinessgroup>.
31. "In Support of Saudi Vision 2030: Saudi Arabia and GE Announce Raft of MoUs and Agreements Worth \$15 Billion in Industrial Project Development and Cross-Sector Capacity Building," news release, GE, May 20, 2017, <https://www.ge.com>.



Table 5

## Examples of General Electric's leading role in Saudi investments



NOT EXHAUSTIVE

| Saudi Entity                                                                                                         | Scope of Agreement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br>أرامكو السعودية<br>saudi aramco | <ul style="list-style-type: none"> <li>A transformative memorandum of understanding (MOU) for digitizing operations and generating \$4 billion in annual productivity improvements</li> <li>GE to provide a private Predix Industrial Internet of Things cloud, APM, and industry-specific applications while staffing a digital transformation office (DTO) with local experts</li> <li>The DTO to create 250 high-tech jobs and boost demand for 500 digital industrial careers, stimulating the local economy</li> <li>GE to develop a STEM curriculum to nurture Saudi digital industrial talent, addressing future needs in software development and data science</li> </ul> |
| <br>دسر<br>DUSSUR                   | <ul style="list-style-type: none"> <li>A joint venture at the GE Manufacturing and Technology Center [GEMTEC] in Dammam to enhance local manufacturing capabilities and significantly scale up the global energy industry's supply chain</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <br>معادن<br>MAADEN                 | <ul style="list-style-type: none"> <li>GE's Digital Solutions to support Ma'aden in adapting to decreasing ore grades, reducing costs, improving equipment reliability, and increasing overall productivity</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <br>مركز الملك فهد<br>KFMC          | <ul style="list-style-type: none"> <li>KFMC and GE Healthcare to collaborate on radiology privatization, validating government-wide operations and enhancing medical imaging services</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <br>ستى<br>stc                     | <ul style="list-style-type: none"> <li>Through the Electronic Medical Records Predix Solution and Centralized Appointment System, STC and GE, supported by the Saudi Ministry of Health, to transform centers into digital hospitals, benefiting primary-care facilities and hospitals regionally</li> </ul>                                                                                                                                                                                                                                                                                                                                                                      |

Source: "In support of Saudi Vision 2030: Saudi Arabia and GE announce raft of MoUs and agreements worth \$15 billion in industrial project development and cross-sector capacity building," news release, GE, May 20, 2017, <https://www.ge.com>.

In infrastructure, contracts are being awarded to global construction companies. NEOM, a special economic zone in the kingdom, selected Bechtel to provide executive project management for its urban development project.<sup>32</sup> A joint venture of Vinci Construction UK and Al Muhaidib Contracting Company (AMC) has won two contracts in Jeddah with the Saudi Arabian National Water Company.<sup>33</sup> Sutherland has an agreement to collaborate on designing, developing, and implementing digital infrastructure in Saudi Arabia, boosting the local economy by creating over 50,000 jobs.

In health care, US and European pharma companies are partnering with Saudi health care organizations to invest in research, development, and production of medicines and medical devices.<sup>34</sup> US-based health care providers also are establishing collaborations with Saudi hospitals and institutions to enhance health care services, knowledge exchange, and medical education.<sup>35</sup>

32. "NEOM Selects U.S. Construction Leader Bechtel to Accelerate Primary Infrastructure Development for Its Cognitive Cities," news release, Neom, August 10, 2020, <https://www.neom.com>.

33. "Vinci Construction UK Lands £110m in Saudi Contracts," The Construction Index, September 25, 2012, <https://www.theconstructionindex.co.uk>.

34. "A Global Effort," sponsored content in *Riyadh Global Medical Biotechnology Summit*, 2021, accessed at <https://www.nature.com/articles/d42473-022-00175-1>.

35. "Mass General Brigham Explores Collaboration Avenues in Saudi Arabia," *Arab News*, October 19, 2022, <https://www.arabnews.com>.



In financial services, the Saudi government granted banking licenses to multiple foreign lenders in 2021 to operate in the kingdom. Among them are BNP Paribas, Deutsche Bank, and J. P. Morgan. Multiple foreign banks, including Citi and Standard Chartered, have full operations there as well.<sup>34</sup>

## Room for More Investment

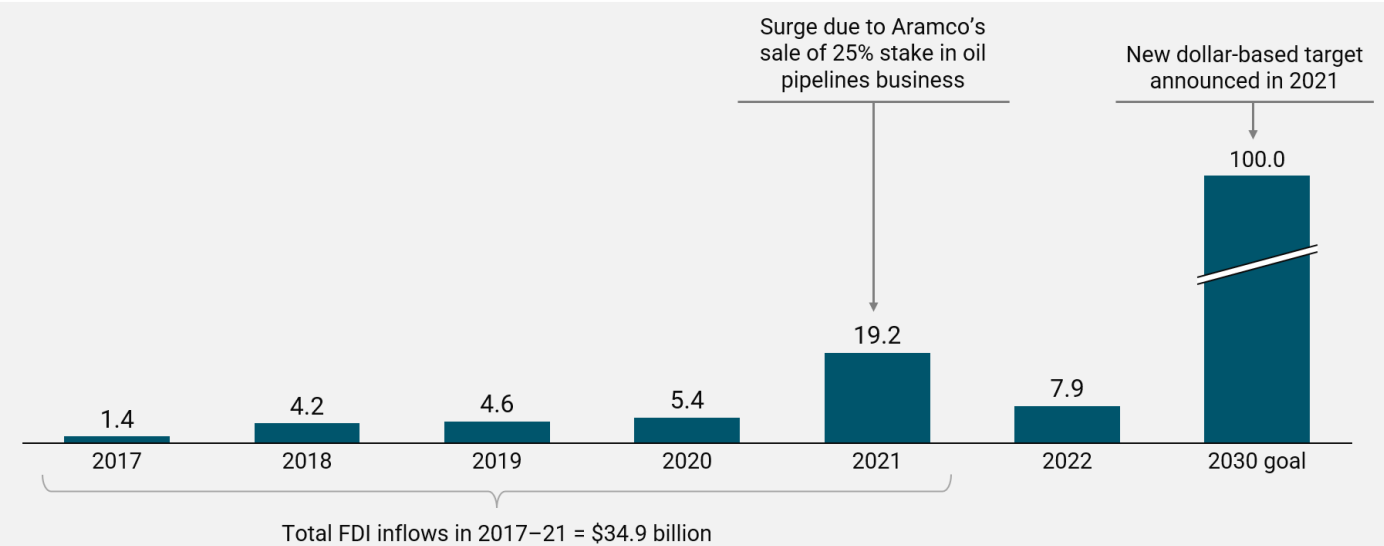
The growing investment in Saudi Arabia may seem to be a veritable gold rush. However, the kingdom has far to go to reach its goal of \$100 billion in foreign direct investment (see Exhibit 6). For the years 2017–21, FDI inflows totaled \$34.9 billion—a sizable sum but only half the amount that flowed into the United Arab Emirates over the same period.<sup>36</sup>

### Exhibit 6

#### Foreign direct investment is growing but remains one of Saudi Arabia's biggest challenges



##### Saudi Arabia foreign direct investment (FDI), \$ billion



Source: "Saudi Arabia Records \$2.1 bln FDI Inflows in Q2 2022," Argaam, November 15, 2022, <https://www.argaam.com>.

36. Piotr Schulkes, "The Changing Saudi Banking Landscape," Middle East Institute, July 22, 2021, <https://mei.edu>.

37. "Saudi Arabia Records \$2.1 bln FDI Inflows in Q2 2022," Argaam, November 15, 2022, <https://www.argaam.com>.





## Optimizing Partnerships

Not all collaborations deliver equal value. Achieving the goals of Vision 2030 will require partnerships in which all parties support those goals. Consider three possible scenarios:



### Limited Prosperity

External entities prioritize individual gains over shared prosperity, with limited commitment to the kingdom's long-term growth and development—say, by repatriating profits, limiting the transfer of technology and knowledge, and deploying a predominantly foreign workforce. For example, international financial institutions prioritize profits from wealthy clients and multinational corporations over support for local small and medium-size enterprises, hindering the kingdom's economic objectives.



### Mixed Motivations and Outcomes

Some entities genuinely support Vision 2030, while others resort to a self-interested approach. Varying degrees of collaboration and success are achieved across different sectors and projects. For example, international firms enable large-scale renewable-energy projects with varying degrees of technology transfer and sustainable impact. Success in achieving Vision 2030 therefore depends on the balance of supportive and self-interested collaborators.



### Collaborative Prosperity

The interests of Saudi Arabia and external entities are fully aligned. External entities actively contribute expertise, resources, and capital to support Vision 2030, and both parties have a long-term perspective to build sustainable partnerships. Saudi Arabia's economy diversifies successfully, and both the kingdom and the collaborating entities prosper. For example, KACST's collaboration with MIT boosts research, knowledge exchange, and skill development, fostering local innovation and entrepreneurship in Saudi Arabia.



Clearly, the third scenario, Collaborative Prosperity, is the one Saudi Arabia will want to achieve. The likelihood of this scenario will be greater if the Saudi government insists on certain conditions and its partners are open and able to meet those conditions. These conditions cover selection criteria, due diligence, regulation, risk sharing, and a control process that includes both monitoring and evaluation.

### **Clear Selection Criteria**

Criteria for selecting partners must be clear and transparent. They should include long-term partnership, knowledge transfer, technology sharing, and support for local development to align with Saudi Arabia's goals.

When choosing partners, the Saudi government should prioritize entities that are genuinely committed to contributing to the kingdom's success, fostering a productive and mutually beneficial relationship in Vision 2030.

### **Due Diligence**

The process of due diligence should be thorough, encompassing an assessment of collaborators' capabilities, track record, and alignment with Vision 2030 goals. Areas for analysis include past collaborations, social responsibility initiatives, and a sustainable growth vision for the kingdom.

### **Regulatory Framework**

A robust regulatory framework can ensure that collaborations align with Saudi Arabia's national interests and socioeconomic objectives. Such a framework would include guidelines on technology transfer, local-content requirements, talent development, and investment commitments.

### **Risk-Sharing Arrangements**

Saudi Arabia and international entities should be expected to share risks and responsibilities. These should be spelled out with formal arrangements that foster a mutually beneficial partnership in which payouts are tied to the achievement of goals associated with realization of Vision 2030.

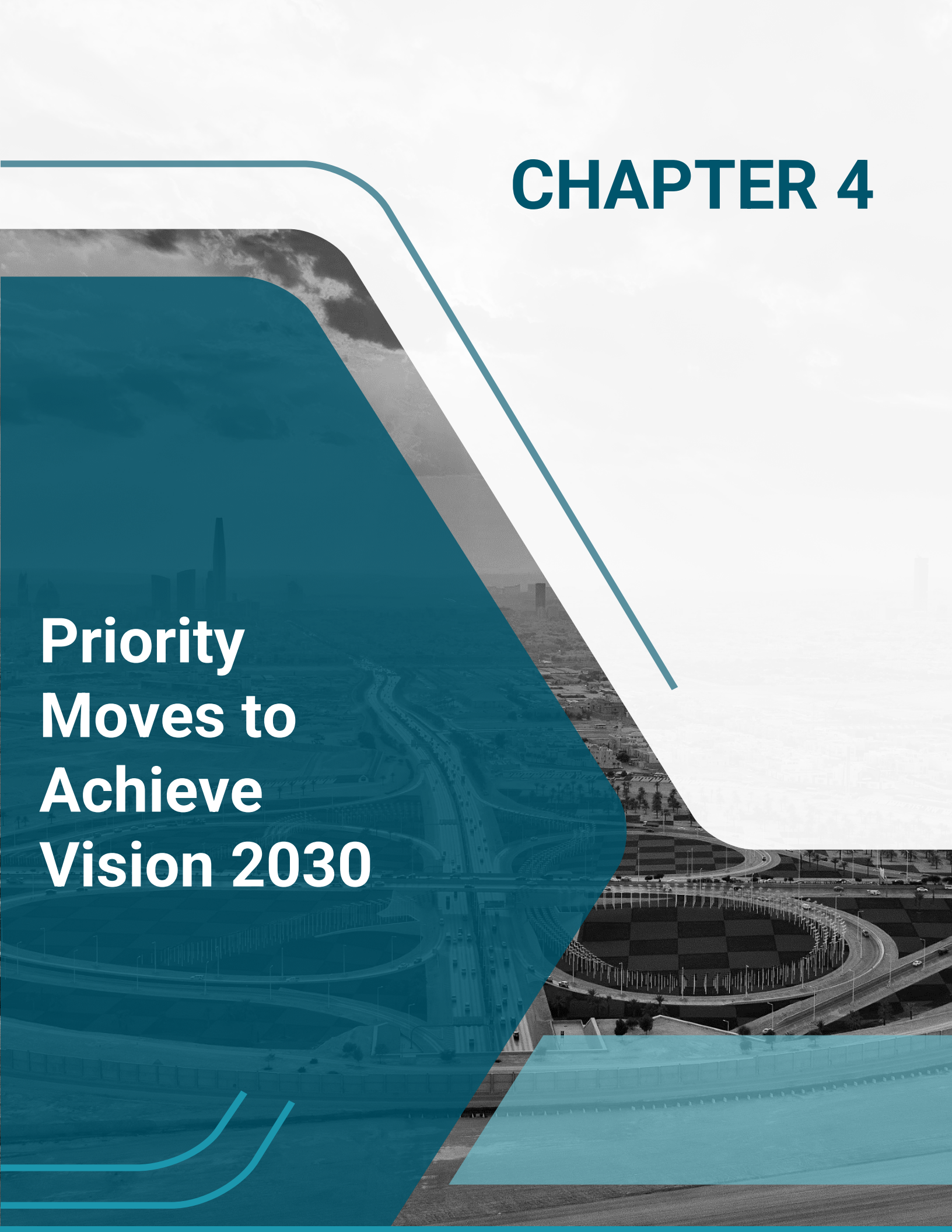
### **Monitoring and Evaluation**

A continuous process of monitoring and evaluation is necessary to assess the progress and impact of each collaboration. These practices enable identification of deviations and present opportunities for course correction or, if necessary, a reassessment of the partnership.

While Vision 2030 is ambitious, many signs point to the possibility of success. Already investments are flowing into the kingdom. By focusing on which partners to invite into the transformation process, the Saudi government can increase the likelihood of collaboration leading to prosperity.

# CHAPTER 4

## Priority Moves to Achieve Vision 2030





# Priority Moves to Achieve Vision 2030



Given the breadth and ambition of Vision 2030, implementing the transformation will require continued and perhaps intensified focus. We see four areas of activity as priorities: foreign direct investment, local champions, ecosystem development, and human capital development (Table 6). For each of these priorities, we recommend that the Saudi government consider the goals and tactics described in this chapter.

Table 6

| Four immediate priorities for realizing Vision 2030 |                                                                                                                                                                                         |                                                                                                                                                                     |                                                                                                                                                                              |                                                                                                                                                                                        |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                     | 1. Foreign Direct Investment                                                                                                                                                            | 2. Local Champions                                                                                                                                                  | 3. Ecosystem Development                                                                                                                                                     | 4. Human Capital Development                                                                                                                                                           |
| Objective                                           | Adopt the <b>China or India model</b>                                                                                                                                                   | Learn from UAE to develop <b>more Aramcos</b>                                                                                                                       | Build the <b>next Silicon Valley</b>                                                                                                                                         | Emulate the <b>success of South Korea</b>                                                                                                                                              |
| Strategy                                            | <ul style="list-style-type: none"> <li>Proactive investment promotion</li> <li>Streamlined regulatory framework</li> </ul>                                                              | <ul style="list-style-type: none"> <li>Entrepreneurship support programs</li> <li>Access to capital</li> </ul>                                                      | <ul style="list-style-type: none"> <li>Prioritization of industries based on assessment of readiness and potential</li> <li>R&amp;D, tech transfer</li> </ul>                | <ul style="list-style-type: none"> <li>Upskilling and reskilling programs</li> <li>Industry-academia collaboration</li> </ul>                                                          |
| Tactics                                             | <ul style="list-style-type: none"> <li>Marketing and industry-specific campaigns</li> <li>Single-window clearance system</li> <li>Online platforms for licensing and permits</li> </ul> | <ul style="list-style-type: none"> <li>Incubators and accelerators</li> <li>Technology parks and innovation centres</li> <li>Innovation funds and grants</li> </ul> | <ul style="list-style-type: none"> <li>Industry-specific innovation centers</li> <li>Knowledge-sharing platforms</li> <li>Digital infrastructure and connectivity</li> </ul> | <ul style="list-style-type: none"> <li>Vocational and technical training</li> <li>Emphasis on STEM<sup>1</sup> education</li> <li>Industry advisory boards for universities</li> </ul> |

<sup>1</sup> Science, technology, engineering, and math.





## Foreign Direct Investment

To meet goals for foreign direct investment, the Saudi government should consider adopting the approach used by China . India has followed a similar course, so it is an additional source of examples to consider. Broadly speaking, both countries have engaged in proactive investment promotion and streamlined their regulatory framework. Tactics to consider include marketing and industry-specific campaigns, a single-window clearance system, and online platforms for licensing and permits.



### Proactive Investment Promotion

To promote foreign direct investment, China and India have used marketing and industry-specific campaigns. In India, such campaigns obtained funding for the National Infrastructure Pipeline, a five-year plan for investing \$1.5 trillion in roads, railways, energy, and airports. In addition, Start-up India—a supportive environment with access to funding, tax benefits, and simplified regulations—launched in 2016. Two years earlier, Make in India promoted India as a global manufacturing hub for automobiles, textiles, and electronics. In 2000, India introduced special economic zones (SEZs), which are areas with tax benefits, streamlined regulations, and world-class regulations.

China launched several promotional campaigns over the past few decades. Made in China 2025 was a 2015 campaign to upgrade manufacturing capabilities in robotics, aerospace, and biotechnology. The 2015 Internet Plus Action plan sought to integrate internet with traditional industries for tech-based innovation. In 2000, the Go West campaign offered incentives and tax breaks for investing in Western regions. During the 1980s and 1990s, China established Coastal Economic Zones, including Shanghai Pudong, Tianjin Binhai, and Guangdong Shenzhen.





### Streamlined Regulation

Both countries also streamlined the regulatory process, which can reduce hurdles for foreign investors and simplify doing business. One way of doing this is with a single-window clearance system. For example, in India, the Foreign Investment Facilitation Portal (FIPB), a centralized authority for foreign investors, simplifies approvals and the navigation of bureaucratic processes.

Online platforms also can streamline the process of obtaining licenses and permits. Both India and China have such portals, called e-Biz portal in India for online application for various licenses and permits and the Foreign Investment Information Reporting System (FIIRS) in China for online registration and submission of documents.





## Local Champions

Develop more Aramcos—large homegrown companies meeting a major need in the marketplace. We call such businesses “local champions.” A way to develop local champions is to provide access to capital through entrepreneurship support programs, such as incubators and accelerators, technology parks and innovation centers, and innovation funds and grants.

To develop more Aramcos, the Saudi government could follow the footsteps of its next-door neighbor, the United Arab Emirates. UAE homegrown champions include Emirates, one of the world’s leading airlines. Founded in 1985, Emirates is renowned for its luxury customer experience. Another is Etihad, established in 2003, which has achieved rapid growth and international recognition as a leading airline. Adnoc, one of the largest oil and gas companies globally, operates across the entire value chain of the petroleum industry. Emaar, a prominent real estate developer, is known for iconic projects like Burj Khalifa and Dubai Mall. Souq.com, founded in 2005, is the leading e-commerce platform in the Middle East and was acquired by Amazon in 2017. Careem, founded in 2012, is a ride-hailing service that has expanded to be a major competitor to Uber in the Middle East.

Various initiatives helped to develop the Emirates’ homegrown champions:

- Incubators and accelerators. Dubai Future Accelerators connects government entities with innovative start-ups to co-create and test solutions for pressing challenges. Sharjah Entrepreneurship Center provides co-working spaces, mentorship, funding, and networking opportunities in technology, media, and health care.<sup>38</sup>
- Technology parks and innovation centers. Masdar City in Abu Dhabi is focusing on renewable energy and sustainable technologies. Dubai Science Park provides state-of-the-art infrastructure, laboratory spaces, and networking opportunities in life sciences, health care, and energy.<sup>39</sup>
- Innovation funds and grants. The Khalifa Fund offers financing and support services to Emirati entrepreneurs to launch and expand their ventures.<sup>40</sup> The Mohammed bin Rashid Innovation Fund provides funding and mentorship to start-ups and innovative projects.<sup>41</sup>

38. “Dubai Future Accelerators: Co-creating the Future,” Dubai Future Foundation, <https://www.dubaifuture.ae>.

39. “Dubai Science Park Spotlights the Future of Healthcare, Innovation and R&D at Arab Health 2022,” news release, Dubai Science Park, January 22, 2022.

40. Mustafa Alrawi, “Khalifa Fund means opportunities to empower Emirati entrepreneurs,” *The National*, January 17, 2015, <https://www.thenationalnews.com>.

41. Mohammed bin Rashid Innovation Fund website, <https://mbrif.ae>.



## Ecosystem Development

California's Silicon Valley provides a model for ecosystem development. Building the world's next Silicon Valley in Saudi Arabia requires identifying the right priority sectors and industries to serve. To do this the Saudi government, universities, and or businesses should conduct a comprehensive assessment based on each sector's or industry's potential for growth and innovation. The priorities could combine one or more sectors—for example, technology, renewable energy, biotechnology, and advanced manufacturing.



Once priorities are established, KSA should double down on R&D activities in the priority sectors by offering incentives and funding support. The government should also enable technology transfer and knowledge exchange by facilitating partnerships of businesses with leading research institutions and universities .

Industry-specific innovation centers are a characteristic of Silicon Valley that would be transferrable to Saudia Arabia. For example, Stanford Research Park and the NASA Ames Research Center provide a conducive environment for start-ups, researchers, and entrepreneurs by offering access to state-of-the-art facilities, mentorship programs, and networking opportunities.

Another Silicon Valley practice is the encouragement of knowledge sharing within and across organizations. Silicon Valley Open Doors (SVOD) for 15 years brought together entrepreneurs, investors, and industry experts to share insights, pitch new businesses, and exchange ideas.<sup>42</sup> In addition, tech-focused meetups, forums, and online communities facilitate knowledge sharing among professionals. Stanford University and the University of California, Berkeley, encourage close collaboration with industry partners to accelerate the commercialization of new technologies.

All of these practices are easier with digital infrastructure and connectivity. The government and Saudi businesses should consider investments in high-speed internet connectivity and advanced telecommunications networks. Enabling seamless communication, collaboration, and access to digital resources can lay the foundation for innovation and entrepreneurship.

42. Silicon Valley Open Doors website, <https://www.svod.org>.



## Human Capital Development

For excellence in human capital development, the model to apply is South Korea. This country is known for upskilling and reskilling programs, industry-academia collaboration, excellent vocational and technical training, an emphasis on STEM education, and the practices of universities establishing industry advisory boards.

As a result of such efforts, South Korea stands as a shining example and inspiration.<sup>43</sup> Its literacy rate for individuals aged 15 years or more is 99.2% (as of 2018). It ranks first in the global Program for International Student Assessment (PISA) assessment of math and science performance. Its gross enrollment in secondary education was 98.5% in 2018. Seventy percent of South Korean 24- to 35-year-olds have completed tertiary education—the world's highest rate.

To emulate South Korea's remarkable achievements, Saudi Arabia can fund vocational and technical training, invest in STEM education, and enable industry collaboration.

### Vocational and Technical Training

South Korea has a dual education system where students divide time between classroom learning and on-the-job training. Workforce development institutes offer short-term courses, retraining programs, and skills development initiatives for adult learners. There are national competency standards for various occupations and training programs curricula for these occupations are aligned with these standards.

### Emphasis on STEM Education

South Korea has established dedicated science high schools with rigorous STEM curricula, advanced laboratory facilities, and specialized programs. Science education centers across the country offer hands-on learning and STEM activities. STEM teacher training enhances teachers' pedagogical skills, content knowledge, and understanding of innovative teaching methods.



43. Jeff Hays, "Education in South Korea: Statistics, Global Tests, Role in Society and Inequalities," Facts and Details, [https://factsanddetails.com/korea/South\\_Korea/Education\\_Health\\_Transportation\\_Infrastructure/entry-7373.html](https://factsanddetails.com/korea/South_Korea/Education_Health_Transportation_Infrastructure/entry-7373.html).





## Industry-Academia Collaboration

Collaboration between industry groups and academic institutions can help training initiatives stay at the forefront of advancing knowledge and technology. South Korea's Electronics and Telecommunications Research Institute (ETRI) collaborates with universities for research in telecommunications, IT, and electronics.<sup>44</sup> A partnership between Samsung Electronics and Sungkyunkwan University provides joint training programs in semiconductor technology and software engineering.<sup>45</sup> And the Intelligent Robotics Research and Development Center is a research consortium between universities and industry partners.<sup>46</sup>



As the kingdom looks to adopt ideas from other countries, it must tailor them to its specific conditions. While drawing inspiration from global examples, it is crucial to seek counsel and guidance to implement strategies that are appropriate for the kingdom's ambitious yet attainable Vision 2030. By leveraging the strengths and learnings from others, Saudi Arabia can pave its own path to success and realize its ambitious vision.

44. Woong Gyu Park, "KAIST Collaborates with Industry in AI Team," *KAIST Herald*, April 2, 2020, <https://herald.kaist.ac.kr>.

45. Megha Besuccess, "Samsung Electronics to Nurture Semiconductor Talent via Partnership with 3 Regional Institutes in Korea," *Korea Tech Today*, March 28, 2023, <https://www.koreatechtoday.com>.

46. Jong-Oh Park, "South Korean Private-Public Partnership to Invest \$2.6B in Robot Industry by 2018," *Robohub*, August 11, 2014, <https://robohub.org>.



## Priority Moves for Investors

Foreign companies looking to do business in the kingdom should focus on localized offerings, long-term commitments, and collaboration with the Saudi government and institutions.

### Localization Strategies

We foresee the greatest opportunities going to companies that are able to adapt products, services, marketing, and distribution to Saudi Arabia's local context. For product and market strategy, this especially involves adaptation to the local language and culture. An example of success in the Middle East is Nestlé Arabia, which has developed localized offerings featuring Arabic-inspired flavours, launched with Arabic-language advertisements.<sup>47</sup>

Distribution strategies should consider the local infrastructure, looking for ways to adapt logistics, transportation, and supply chain management to ensure fulfilment and delivery are efficient, on time, accurate, and reliable. Aramex, for example, achieved last-mile success in Dubai by introducing smart locker systems so customers can receive packages at preferred locations.<sup>48</sup>

### Long-Term Commitment with a Win-Win Perspective

Companies are most likely to be welcomed into the Saudi marketplace if they exhibit a long-term commitment and a desire to pursue ventures that benefit the local economy and society as well as their bottom line. This mindset is associated with actions that include accelerating digital transformation and strengthening Saudi Arabia's position as an innovation hub. Microsoft, for example, has invested in a new cloud data center region in the Kingdom to provide scalable, secure, and resilient cloud services. The cloud region is expected to drive substantial economic growth, contributing \$24B in new revenues to Microsoft, its partners, and cloud-using customers, above 2022 levels over the next four years, per IDC study.<sup>49</sup>

47. Sarah Townsend, "Nestlé to launch Arabic-inspired products 'by year end'," *Arabian Business*, May 16, 2017, <https://www.arabianbusiness.com/industries/retail/nestl-launch-arabic-inspired-products-by-year-end-674245>.

48. "Aramex Announces the Successful Testing of Drone and Robotic Delivery Service in the UAE," *Aramex News*, February 14, 2023, <https://www.aramex.com>.

49. "Microsoft Announces Intent to Expand Cloud Regions through Saudi Arabia Datacenter," *Microsoft News Center*, February 6, 2023, <https://news.microsoft.com>.



Companies also might consider exploring joint investment opportunities, especially in prioritized sectors like industrials. One way to get started is to sign MoUs with Saudi Arabia's Ministries to express interest in and build trust for a long-term partnership. One company already on this path is Hyundai, which is collaborating with Saudi Arabia's Ministry of Industry to build a complete assembly plant for electric and internal combustion engine cars. The plant is part of Hyundai's "completely knocked down" (CKD) method of market entry, in which the Saudi plant imports components for local vehicle assembly—creating local jobs, not just selling vehicles in Saudi Arabia.<sup>50</sup>

### **Collaboration with Saudi Government and Institutions**

A key way to gain the expertise and relationships necessary for long-term commitments and localized strategies is to collaborate with the Saudi government and other local institutions. For example, Hilton has partnered with the Saudi government to help it accelerate growth in the hospitality sector of the economy. It has signed a MoU with the Saudi Tourism Authority to explore attracting visitors from key markets to the kingdom from Africa and the Middle East. The MoU is part of an ongoing commitment to forge strong partnerships with key players in the Kingdom's tourism ecosystem.<sup>51</sup>

Other valuable collaborations could involve academia in order to advance education and conduct research into new technology. IBM is collaborating with King Saud University to develop advanced skills and upskill talent in high-demand areas such as artificial intelligence and machine learning. Under the signed MoU, IBM aims to implement eight innovative initiatives under future definitive terms to upskill 100,000 young Saudis over five years and bolster the Kingdom's position as a hub of technology and innovation in the Middle East and North Africa region.<sup>52</sup>

50. Sakina Fatima, "Hyundai to build electric car factory in Saudi Arabia," *The Siasat Daily*, January 2, 2023, <https://www.siasat.com/hyundai-to-build-an-electric-car-factory-in-saudi-arabia-2492734/>

51. "Boosting Saudi Arabia's Positioning as Regional Hub for Technology and Innovation: Strategic Partnership with IBM to upskill 100,000 Saudis," *MCIT News*, July 16, 2022, <https://www.mcit.gov.sa/en/news/boosting-saudi-arabias-positioning-regional-hub-technology-and-innovation-strategic>.

52. "Aramex Announces the Successful Testing of Drone and Robotic Delivery Service in the UAE," *Aramex News*, February 14, 2023, <https://www.aramex.com>.



# About the Authors



**Nick Santhanam,**  
Chief Executive Officer,  
Fernweh Group

- Former Senior Partner at McKinsey & Company and leader of their global industrials practice
- Co-author of *The Titanium Economy: How Industrial Technology Can Create a Better, Faster, Stronger America* (PublicAffairs, October 2022), a best seller across multiple categories
- A global convener of several McKinsey annual events, including the industrial CEO event (GILS), industrial-tech and semiconductors CEO event (T-30), food processing CEO event (FPH-30), and senior tech influencers summit (TEDS)

**Nick.Santhanam**  
[@fernweh.com](mailto:Nick.Santhanam@fernweh.com)



**Gaurav Batra,**  
President & Chief  
Executive Officer, Ayna.AI

- Former Partner at McKinsey & Company and co-leader of North America industrials practice and leader of Advanced Data Analytics service line
- Co-author of *Titanium Economy: How Industrial Technology Can Create a Better, Faster, Stronger America* (PublicAffairs, October 2022), a best seller across multiple categories
- Leader of several McKinsey annual events, including the industrial CEO event (GILS) and industrial-tech and semiconductors CEO event (T-30)

**GBatra@ayna.ai**



**Nidhi Arora,**  
Vice President,  
Ayna.AI

- Former Associate Partner at McKinsey & Company, based in the Seattle office
- Core member of McKinsey's industrial and industrial technology practice in North America
- Led engagements on end-to-end margin transformation and growth strategy for such clients
- Co-author of McKinsey publications, including *Value Creation in Industrials* and articles in *McKinsey on Building Construction and Technology*

**Nidhi.Arora@fernweh.com**



**Nitik Gupta,**  
Analyst,  
Ayna.AI

- Former Investment Banking intern at JP Morgan, involved in \$500Mn+ transactions and a \$70Bn+ IPO
- Undergraduate research projects on demand forecasting and price optimization
- Bachelor of Technology in Mechanical Engineering from NIT Jaipur

**Nitik.Gupta@fernweh.com**

# Disclaimer (1/2)



- Past performance is not indicative of future results. Specifically, there is no guarantee that the methods described herein will be profitable in the future. There can be no assurance that any activities will achieve results comparable to what is discussed herein or avoid losses.
- Neither these written materials, nor any accompanying oral presentation, or the two combined, should in any way be interpreted as investment advice. Mirabilis Management Company LLC (the “Firm”) does not provide individualized investment advice. Any person or entity considering an investment through the Firm or Fernweh Group should carefully review the offering documents relative to that investment vehicle, and consult with appropriate legal, tax and investment professionals. Any person in receipt of these materials should consult the same professionals before acting on any of the commentary presented herein, as this presentation is not a substitute for personalized investment advice.
- This presentation is confidential and is intended solely for the information of the person to whom it has been provided. It is not to be reproduced or transmitted, in whole or in part, to third parties, without prior consent. By accepting or accessing this document or any related materials you agree to be bound by the limitations and conditions set out herein and will be taken to have represented, warranted and undertaken that you have read and agree to comply with the contents of this disclaimer including, without limitation, the obligation to keep information contained in this document and any related materials confidential. No regulatory body has reviewed or approved or passed upon these materials or the merits of any investment discussed herein.
- These materials are intended to be read as a whole. Excerpts cannot be removed without sacrificing the meaning of any portion. Many statements herein represent abbreviated commentary. These statements are in no way intended to be a full outline of a company’s operations or outlook. The information in this document does not purport to be comprehensive and has not been independently verified. No reliance may be placed for any purposes whatsoever on the information contained in this document or related materials or in the completeness of such information.
- Certain portions of this presentation may include information regarding the performance of various industries or companies or the economy in general. Such information is taken from various sources, and while believed to be reliable, is not necessarily independently verified, and accordingly, such information should not be relied upon in making any investment decisions. While this document has been prepared in good faith, it does not constitute a representation, warranty or undertaking, express or implied, with respect to

# Disclaimer (2/2)



- the information or opinions contained in it and no responsibility or liability is accepted as to the accuracy, completeness or reasonableness of such information or opinions or any other written or oral information made available to any party or its advisers. Without prejudice to the foregoing, we do not accept any liability whatsoever for any loss howsoever arising, directly or indirectly, from use of this document and/or related materials or their contents or otherwise arising in connection therewith. The information set out herein and in any related materials is subject to updating, completion, revision, verification and amendment, and such information may change materially. We are under no obligation to provide the recipient with access to any additional information or to update this document or any related materials or to correct any inaccuracies in it which may become apparent.
- Some portions of this presentation include the use of various charts or graphs. These are intended as visual aids only and are not to be construed as a means to make investment decisions of any kind.
- The information presented represents the opinions of the Firm and Fernweh Group and all statements of opinion and/or belief contained in this document and all views expressed represent our own assessment and interpretation of information available as at the date of this document. While these opinions are based on our experience and research, there can be no guarantee that any expectation discussed in these materials will be realized.



AYINIA

— — —