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# Roadmap to Africa

A turning point in economic relations

April 2023

This white paper is part of the preparatory materials for The Africa Roundtable “Roadmap to Africa: A turning point in economic relations”, hosted by the Global Perspectives Initiative (GPI). While GPI is organizing and hosting this roundtable, McKinsey is supporting this initiative as a knowledge partner and, as such, authored the whitepaper at hand. The whitepaper outlines ideas that are intended to provide inspiration for the roundtable discussions. It synthesizes key insights from McKinsey’s recent research on economic developments in Africa that have been curated by Oliva Robinson, Harald Poeltner, and Hauke Engel in McKinsey’s Nairobi office. McKinsey is not responsible for the content of any discussions by the roundtable participants that occur before, during, or after this event.





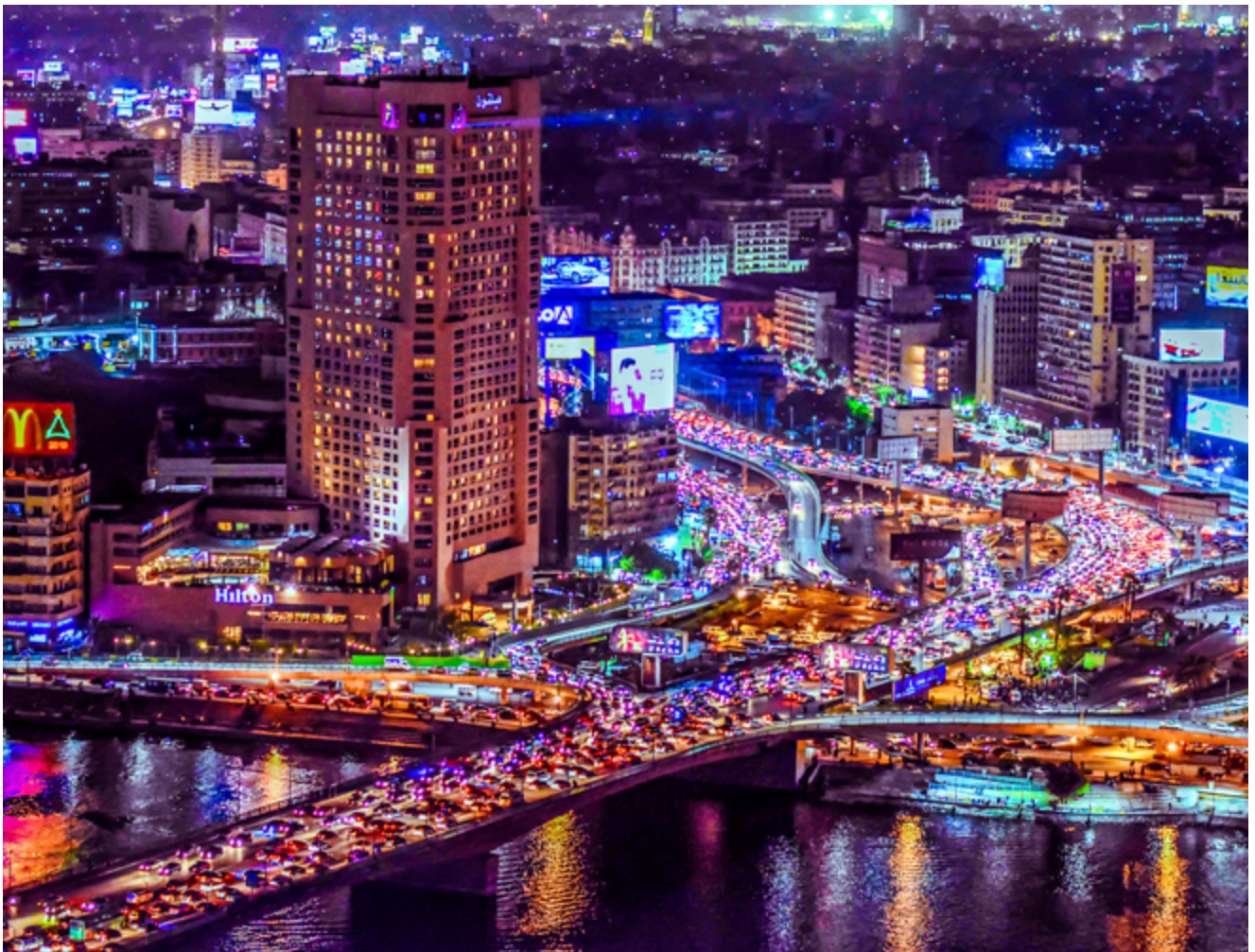
# Introduction

We live in an interconnected world. Each world region relies on imports for more than 25 percent of at least one important type of good and around 40 percent of global trade is “concentrated”, meaning that the importing economy relies on three or fewer nations for the supply of a given resource or manufactured good.<sup>1</sup> Every country participates in concentrated trade relationships, sourcing at least 20 percent of imports (by value) from three or fewer trading partners.

While concentrations of trade are beneficial in providing access to technologically advanced inputs and driving efficiencies, they can make trade highly susceptible to geopolitical shifts and supply chain disruption caused by events such as COVID-19 and Russia’s invasion of Ukraine.

Rising labor costs and fewer tax concessions also mean that the economics of some major global producers and exporters, such as China, are also no longer as favorable as they once were.

As a result, some countries are beginning to look elsewhere for near-shoring production and imports, and leveraging alternative sources of supply in an effort to diversify supply chains. Africa—with its large labor force, underdeveloped markets, and an abundance of natural endowments—could be an attractive prospect for countries and investors seeking better returns and diversification.



<sup>1</sup> Olivia White, Jonathan Woetzel, Sven Smit, Jeongmin Seong, and Tiago Devasa, “The complication of concentration of global trade,” McKinsey, January 12, 2023.

# Africa is a strong contender for investment and diversification

A number of factors are driving opportunity across the African continent, from favorable macro-level indicators such as a fast-growing, urbanizing population, growing regional cooperation, and the availability of natural resources, to improved digital access.

While population growth in other regions has slowed, Africa's has increased by 2.4 percent per year for the past 30 years, according to the African Development Bank. Today, more than 60 percent of the population is under the age of 25. And by 2030, young Africans are expected to constitute 42 percent of global youth.<sup>2</sup>

The continent has also demonstrated continued economic resilience. Despite the challenging external environment and the shock of the pandemic, all but one African economy maintained positive growth in 2022 and the outlook for 2023 and 2024 is stable. Africa's GDP growth is projected to average about 4 percent in 2023 and 2024, higher than the projected world averages of 2.7 percent and 3.2 percent, respectively.

Furthermore, the top five performing African countries before the COVID-19 pandemic are projected to grow by more than 5.5 percent and could reclaim their position among the world's top 10 fastest growing economies.<sup>3</sup>

As internet and mobile access grows, Africa's young urban population is becoming increasingly digitally savvy and this has only accelerated since the COVID-19 pandemic. As a result, markets in Africa have an opportunity to turn to digital solutions to meet their needs, and this is unlocking opportunities for digital players in a variety of sectors including healthcare, agriculture, and financial services. Fintech is, in fact, the fastest-growing startup industry in Africa, garnering 54 percent of known startup funding in 2021.<sup>4</sup>

Africa's size and population gives it clear potential as an investment destination. It offers an immense, and often still untapped, market for goods and services. And with the introduction of the African Continental Free Trade Agreement (AfCFTA) in 2019, which aims to gradually

**Africa's GDP growth is projected to average about 4 percent in 2023 and 2024, higher than the projected world averages of 2.7 percent and 3.2 percent, respectively.**

<sup>2</sup> Hicham El Habti, "Why Africa's youth hold the key to its development potential," World Economic Forum Agenda, September 19, 2022.

<sup>3</sup> Africa's Macroeconomic Performance and Outlook, African Development Bank, January 2023.

<sup>4</sup> Max Flototto, Eitan Gold, Tunde Olanrewaju, Uzayr Jeenah, Mayowa Kuyoro, "Fintech in Africa: The end of the beginning," August 30, 2022.

eliminate tariffs on 90 percent of goods, it will likely become easier for African businesses to trade within the continent, expanding access to these growing markets.<sup>5</sup> While AfCFTA is still not fully implemented, over the longer term it is expected to reduce dependence on imports from outside of Africa, and increase production, trade, and job creation. Regional integration may boost the development of several sectors including agro-processing, pharmaceuticals, and automotive and enable Africa to add value to the products it sells, beyond raw materials or barely processed products.

At the same time, Africa is boosting its infrastructure development. The continent's annual investment in infrastructure has doubled to around \$80 billion since the beginning of the century, and international investors are increasingly spending more across the continent.<sup>6</sup> Even so, Africa lags behind the rest of the world in coverage of key infrastructure classes, such as energy, road and rail transportation, and water infrastructure. For instance, nearly 600 million people in sub-Saharan Africa lack access to grid electricity, with demand for electricity expected

to quadruple between 2010 and 2040. The continent also trails the BRIC countries in other key measures, including rail and road density.

However, the continent has an abundance of natural resources—be it hectares of uncultivated or under-cultivated arable land or renewable energy sources and raw materials—all of which could play a key role in assisting not just Africa, but the world, as they look to increase food security and transition economies onto a more equitable and sustainable footing. In a recent analysis, McKinsey determined that Africa could produce two to three times more cereals and grains than it currently does, significantly adding to the world's output.<sup>7</sup> Solar and hydro power are abundantly available, particularly in northern and southern African regions, as well as along the East African coast and Rift Valley, positioning these regions to support the global clean energy agenda while increasing investment and accelerating access to energy in local communities.<sup>8</sup> Additionally, its rich reserves of cobalt, vanadium and manganese, all of which are required for EV batteries, are likely to become of increasing interest as the world transitions to cleaner energy sources.

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<sup>5</sup> "Powering trade through AfCFTA: a People-driven wholesome development agenda," African Union, February 15, 2023.

<sup>6</sup> Kannan Lakmeharan, Harald Poeltner, Qaizer Manji, Ronald Nyairo, "Solving Africa's infrastructure paradox," McKinsey, March 6, 2020.

<sup>7</sup> Lutz Goedde, Amandla Ooko-Ombaka, and Gillian Pais, "Winning in Africa's agricultural market," McKinsey, February 19, 2019.

<sup>8</sup> Antonio Castellano, Adam Kendall, Mikhail Nikomarov, Tarryn Swemmer, McKinsey, "Brighter Africa: The growth potential of the sub-Saharan electricity sector," McKinsey, February 1, 2015.

# Selected opportunities in key sectors

Taken together these indicators of growth suggest clear opportunities for investors across a variety of sectors, with seven sectors offering the most attractive prospects in the near term: green manufacturing, clean energy, raw materials and mining, fintech and digital services, infrastructure, agriculture and healthcare.

## Manufacturing: An opportunity for Africa to 'grow green'

McKinsey estimates that Africa is responsible for about 10 percent of global greenhouse gas (GHG) emissions, most of which are produced by its manufacturing sector.<sup>9</sup> Roughly 440 megatons of carbon dioxide equivalent (MtCO<sub>2</sub>e)—around 30 to 40 percent of Africa's total emissions—come from manufacturing, with just four African nations (South Africa, Egypt, Algeria, and Nigeria) and a handful of sectors including cement, coal-to-liquids, petroleum refinery, ammonia production (used in fertilizers), and iron and steel sectors contributing the bulk of these.<sup>10</sup>

In the next 20 to 30 years, Africa's manufacturing sector is expected to double in size, following in the footsteps of developed markets. Since about half of the sectors' greenhouse gas emitting assets have not yet been built, there is a significant opportunity to 'grow green' to ensure that, as the sectors expands, emissions do not grow proportionately. McKinsey modelling has shown that in a scenario that sees African manufacturing

utilizing every available lever to drive a steep decline in emissions to reach net zero by 2050, it could cut its scope 1 emissions to 47 MtCO<sub>2</sub>e.<sup>11</sup> This would represent a 90 percent decrease compared to 2018 levels.<sup>12</sup> Such levers could include using low-emitting energy sources such as low-carbon electricity; implementing new production technologies that reduce material use; improving existing technologies' efficiency—for example, by recycling products; and using recycled low-carbon feedback such as carbon capture process emissions.

### Opportunities in the sector

While net zero will be hard to achieve, it offers significant benefits beyond GHG mitigation, including returns on investment and job creation. McKinsey analysis shows that by 2030, about 40 percent of all net-zero investments could be net present value (NPV) positive. Green manufacturing could also add up to \$2 billion in revenues per year over the same period and create around 3.8 million net new jobs.<sup>13</sup>

Eight out of 24 identified green business opportunities have the potential to have significant impact by 2030, considering their probable impact on the environment, near-term feasibility (particularly with regards to technological readiness), and the set-up costs of each industrial unit, as well as the availability of necessary skills and human resources (Exhibit 1).

<sup>9</sup> Lyes Bouchene, Ziyad Cassim, Hauke Engel, Kartik Jayaram, and Adam Kendall, "Green Africa: A growth and resilience agenda for the continent," McKinsey, October 28, 2022.

<sup>10</sup> Lyes Bouchene, Kartik Jayaram, Adam Kendall and Ken Somers, "Africa's green manufacturing crossroads: Choices for a low-carbon industrial future," McKinsey, September 27, 2021.

<sup>11</sup> Scope 1 emissions include all direct greenhouse gas emissions that occur from sources that are controlled or owned by an organization, such as fugitive emissions and those from combustion in owned or controlled boilers, diesel backup generators, and vehicles.

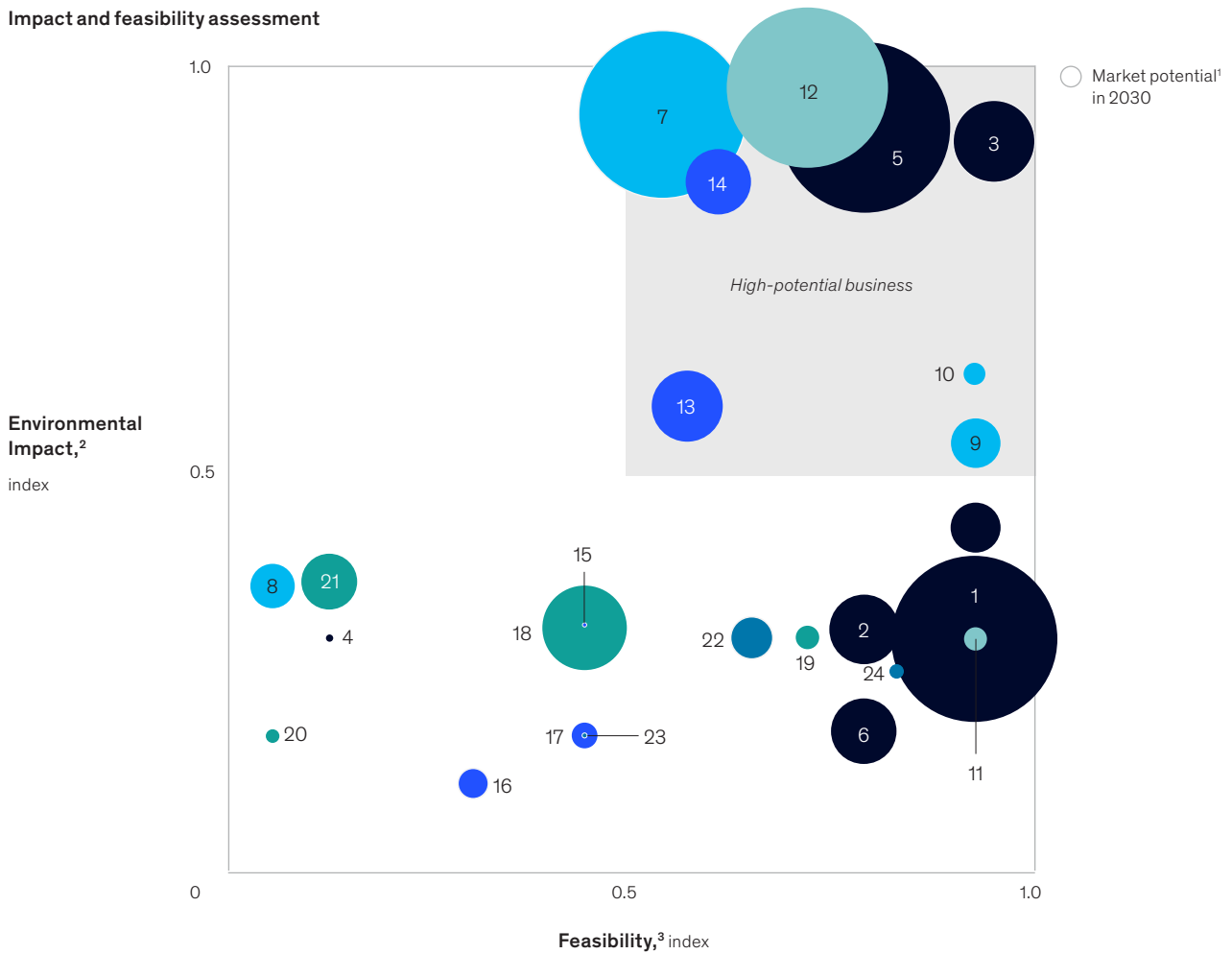
<sup>12</sup> Lyes Bouchene, Kartik Jayaram, Adam Kendall and Ken Somers, "Africa's green manufacturing crossroads: Choices for a low-carbon industrial future," McKinsey, September 27, 2021.

<sup>13</sup> Ibid.



## Eight out of 24 new green business opportunities have potential for high impact by 2030

### Impact and feasibility assessment



#### ● Agro-processing

- Convert waste into black soldier fly animal feed (or other insect proteins)
- Manufacture biological crop protectors such as bioherbicides, biofungicides and bioinsecticides
- Manufacture plant-based protein
- Manufacture cultured meat
- Produce bioethanol as a low-carbon fuel alternative for transportation and cooking (replacement of firewood and charcoal)
- Produce bioplastic using agricultural products

#### ● Power

- Manufacture parts for wind turbines (primarily turbine towers)
- Manufacture solar panels
- Assemble off-grid solar systems (e.g., solar home systems, water pumps) for local markets
- Assemble micro-grids for local markets

#### ● Forestry products manufacturing

- Manufacture high-end cosmetic creams using forest friendly natural products
- Manufacture cross-laminated timber (or other alternatives to cement)

#### ● Transportation

- Assemble (with future potential to manufacture) electric vehicles for personal and commercial uses
- Assemble (with future potential to manufacture) electric motorbikes and other two/three wheelers
- Assemble (with future potential to manufacture) electric fishing boats
- Manufacture storage inputs (batteries and fuel cells) for electric vehicles and boats
- Manufacture charging facilities (and local infrastructure) for electric vehicles

#### ● Basic materials

- Manufacture direct reduced iron (DRI) using hydrogen or biomass fuel for export markets
- Manufacture insulated glass using hydrogen fuel furnaces
- Manufacture electrolyser for green hydrogen production
- Production of green hydrogen for local (substitute fossil fuel for transportation) and export (ammonia) markets

#### ● Textiles

- Set up mechanical recycling plant to recycle PET flakes into polyester fibres
- Set up an "early-mover" hydrothermal plant to recycle polycotton into polyester and cellulose powder
- Manufacture textiles from alternative fibres (e.g., fruit, vegetable, hemp)

<sup>1</sup> Market potential = African market captured by local manufacturers + export outside of Africa

<sup>2</sup> 70% weight is given for CO<sub>2</sub>e emission reduction potential of new businesses, and the remaining 30% weight is given to other environmental impacts

<sup>3</sup> Equal weight is given for all the feasibility assessment dimensions: capital intensity, human resource and technological capability and infrastructure and other considerations

Source: Expert interviews, interviews with manufacturers, internal and external reports, press scan

These high potential green business opportunities are to be found in:

- **Agro-processing**, with the manufacture of plant-based proteins (estimated market size of \$0.5 billion) and bioethanol (\$2.1 billion)
- **Transportation**, including the assembly of electric vehicles (\$0.3 billion) and electric two (or three) wheelers (\$0.5 billion)
- **Power**, with the manufacture of wind turbine parts (\$2.1 billion), the assembly of off-grid solar-systems (\$0.2 billion) and mini-grids for local markets (\$0.1 billion)
- **Forestry**, with the manufacture of cross-laminated timber (\$1.8 billion).

### Charting a path forward

The transition to a green manufacturing sector is not without challenges. Attracting both the investment and talent required and ensuring a just transition are just some significant obstacles the sector will face. Achieving net-zero emissions by 2050 will be underpinned by deep structural changes—commonly referred to as transition

risks—which need to be mitigated. For instance, as buyers prioritize low-carbon intensity production and fossil fuel exports decline, African exports may become less competitive. And since African economies are generally more dependent on commodity exports than other regions, this could adversely impact employment and fiscal health in parts of the continent.

The choices stakeholders make now will shape future economic prosperity and job creation for African citizens. By moving decisively and seizing new green manufacturing business opportunities, investors, governments, and businesses have an opportunity to position themselves ahead of the curve while ensuring that local communities also benefit from Africa's green transition. McKinsey has identified five potential areas of action for stakeholders to focus on to capitalize on Africa's green manufacturing opportunity.

First, it would be necessary for African countries to shift to a net-zero mindset and create an enabling policy environment. To drive a shift towards a net-zero mindset, stakeholders could work together to raise public awareness and develop strong green growth strategies.

**About \$2 trillion of additional investment would be required over the next 30 years to reach net zero. Of this, \$600 billion would be needed to decarbonize existing manufacturing industries and power networks; and \$1.4 trillion to create new low-emitting substitution businesses.**



Second, unlocking green finance needed to fund the transition would be vital. Africa already faces difficulties in attracting investments and building out a green manufacturing sector will require a significant capital outlay. McKinsey estimates that about \$2 trillion of additional investment would be required over the next 30 years to reach net zero, the bulk of which is needed to reshape the power sector.<sup>14</sup> Of this, \$600 billion would be needed to decarbonize existing manufacturing industries and power networks; an additional \$1.4 trillion would be needed to create new low-emitting substitution businesses that replace or supplement high-emitting legacy sectors, like coal-to-liquids, petroleum refining, and cement. To reach these targets, stakeholders can consider developing a pipeline of green projects and creating new financing instruments that match risk and return profiles better.

Third, Africa's underdeveloped infrastructure is a major roadblock for development on the continent. Renewable energy, transport, recycling, green financing, and data infrastructure can be essential precursors for green manufacturing growth. Public-private partnerships could help to speed up investments and new builds in critical green infrastructure to meet the backlog.

Fourth, industries would also need to tackle capability and talent gaps, and ensure adequate reskilling for people as jobs are phased out, bearing in mind that newly created jobs may be in different regions or sectors. While large private companies are likely to drive these changes, governments and development partners can support small and medium-sized enterprises through workforce planning and simulations to identify the required future skills, developing skills certifications for new green jobs to support skills mobility, and developing shared infrastructure such as training institutes and factories to speed up reskilling.

Fifth, significant R&D efforts could be supported by investors and the public and private sectors with local research focused on projects relevant to Africa that are not a priority globally, such as local circular economy solutions and processes to reduce emissions. Additionally, stakeholders

could fast-track the development of new green businesses by setting up dedicated green manufacturing accelerators to spur innovation and enable the scale-up of new green manufacturing technologies and businesses across the continent, notably through research partnerships.

## Energy: The green hydrogen opportunity

There is growing international consensus that green hydrogen is likely to play a vital role in the world's transition to a sustainable energy future—and Africa has a potentially significant part to play in this shift.

Green hydrogen—a zero-carbon hydrogen produced through the electrolysis of water powered by renewable energy—could fill several roles in the energy transition. Hydrogen can be used to produce, store, and move energy in a variety of ways, and has a number of end-uses, especially in hard-to-abate sectors such as long-range modes of transportation and heavy industry. Although green hydrogen's potential has been constrained by—among other things—the high cost of production, production costs are expected to fall by around 60 percent globally by 2030 as policy support ramps up and demand grows.<sup>15</sup> If decarbonization commitments to keep global temperatures below 2°C above preindustrial levels are achieved, global demand for hydrogen is expected to grow up to seven times its current level by 2050—to around 607 Mt of hydrogen equivalent—to meet 18 to 22 percent of global final energy demand.<sup>16</sup>

### Opportunities in the sector

The benefits of green hydrogen for both African and other nations are clear. A thriving green hydrogen industry offers countries a tangible opportunity to reduce their reliance on fossil fuels and diversify energy supplies, while addressing

<sup>14</sup> Ibid.

<sup>15</sup> "Africa's Green Hydrogen Potential," Africa Green Hydrogen Alliance, November 2022.

<sup>16</sup> Ibid.

inter-linked challenges such as climate change, economic growth, and job creation.

In African countries—many of which lag behind the rest of the world in electrification rates—green hydrogen could additionally play a key role in increasing energy access and affordability. An influx of international investment in African green hydrogen projects could create jobs, support infrastructure development, and drive local workforce training in domestic economies. This, in turn, could reduce the cost and complexity of future renewable energy deployment projects and help establish renewable energy supply chains. Furthermore, investors who are attracted to Africa through hydrogen projects may be more inclined to explore investment in other renewable energy deployment initiatives on the continent.<sup>17</sup>

Additionally, owing to their immense capacity for generating renewable energy from solar and wind sources, many countries on the continent are well positioned as potential manufacturers and exporters of green hydrogen.

There is a significant export opportunity for green hydrogen because global hydrogen demand and

supply are mismatched. Only a few world regions, notably China and the United States, are expected to emerge as large centers of both hydrogen demand and supply with sufficient renewable conditions to provide their own supply of green hydrogen. In most other high-demand regions, including the European Union, Japan, and South Korea, low-cost supply is limited, presenting a large potential need for imports from countries where renewables are more abundant.

Both northern and southern regions of Africa could emerge as key export hubs in this scenario. McKinsey estimates that North Africa has a 12-30 Mt of hydrogen equivalent export opportunity, mainly driven by delivering hydrogen to Europe through new or existing pipelines, while Namibia and South Africa could tap into a 10-22 Mt of hydrogen equivalent export market, notably as seaborne suppliers of ammonia.<sup>18</sup>

### Charting a path forward

While demand for clean hydrogen is growing, significant challenges remain to be resolved to unlock the potential of the industry. The hydrogen production value chain is both complex and capital intensive, and many segments are not yet developing at the same rate.

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<sup>17</sup> Ibid.

<sup>18</sup> Ibid.

Staying abreast of constantly evolving technologies and regulations can be daunting.<sup>19</sup> Resource capacity is also currently constrained: electrolyzers are scarce, and the renewable energy required to make the process carbon-free remains limited.

For Africa to take advantage of the opportunity presented by the green hydrogen economy, stakeholders—including private-sector players, civil society organizations, governments and industry players—would need to work together towards a common goal. McKinsey has identified five potential areas of action that these stakeholders could focus on to help to unlock the continent's green hydrogen potential.

First, a national vision and strategic partnerships to signal commitment to the green hydrogen agenda would need to be forged to mobilize resources in support of hydrogen. Second, regulations, such as clear and transparent codification of laws and regulations relevant to the production and adoption of hydrogen, would need to be set in advance to ensure transparency and create confidence in hydrogen projects. Third, improvements in access to low-cost financing may need to be implemented, ensuring that a lack of financing is never a barrier to a project's success. Fourth, critical infrastructure could be improved by enabling value-chain integration and removing physical barriers to the generation, transmission, production, and transportation of green hydrogen to end-users. Finally, skills and knowledge gaps would need to be addressed, especially in countries where downstream value chains have not previously been integrated.

## Raw materials and mining: An opportunity to leverage Africa's rich resource endowment responsibly

Africa is rich in geological resources. From platinum to cobalt to manganese, chromium and diamonds, it is a principal commodity exporter to China, Japan, the United States, and Western Europe.<sup>20</sup>

Key mining countries include the Democratic Republic of Congo (DRC), rich in raw earths such as cobalt, which are becoming increasingly important in the production of high-tech products like smartphones and electric cars; Botswana, the world's largest diamond producing country by value—and South Africa. For South Africa in particular, mining has historically been a critical contributor to the country's economy, with the mining value chain adding more than 300 billion rand to GDP.<sup>21</sup> Mining also directly employs nearly half a million people in South Africa.

However, while South Africa remains rich in minerals and mining assets that carry high potential, including untapped reserves that could give the country a competitive edge, the mining sector is not growing. Recent news from the sector indicates challenges: mining employment has fallen by around one tenth in the last decade, with a net loss of more than 50,000 jobs.<sup>22</sup> South African mining products are also no longer as cost competitive on the global market. Additionally, South African mining operations' productivity has declined over the last five years, a downward trend that stands in contrast to growth trends seen in mining companies in other regions.

South African mining is not alone in experiencing challenges; in the DRC, the mining industry has been subject to supply disruptions linked to law

<sup>19</sup> Arnout de Pee, Tarek El Sayed, Mohamed Ghonima, Ruchin Jain, Rachid Majiti, Joe Rhal, Maurits, Waardenburg, "The clean hydrogen opportunity for hydrocarbon-rich countries," McKinsey, November 23, 2022.

<sup>20</sup> Akash Dowra, Lorenz Jungling, Michael Kloss, Peter Safarik, "Creating Global Mining Winners in Africa," McKinsey, February 8, 2016.

<sup>21</sup> Stewart Goodman, Agesan Rajagopaul, Ziyad Cassim, "Putting the shine back into South African mining: A path to competitiveness and growth," McKinsey, February 2019.

<sup>22</sup> Ibid.

changes and ownership disputes. It has also faced scrutiny and concerns over a lack of transparency and human rights related challenges.<sup>23</sup>

### Opportunities in the sector

With the right interventions, Africa's mining industry has potential to return to growth. Over the next five to ten years, there is a major opportunity for business and government to work together to unlock the continent's high-potential mining assets in particular, including untapped mineral reserves.

For instance, South Africa has rich reserves of vanadium, which include the world's largest resource of titaniferous magnetite layers, known for having the highest vanadium grades. Tapping into this could allow South Africa to enter the value chain for vanadium redox flow batteries (VRFBs)—a key battery technology that is well-suited to utility-scale energy storage, and could replace lithium-ion batteries in many applications. South Africa could also play a key role in encouraging technologies such as vanadium batteries to be commercialized, making it easier for them to be adopted on a global scale, thus increasing demand for this natural resource. Similarly, other minerals—such as high-quality iron ore deposits and large manganese and zinc deposits—are concentrated in the South African province of the Northern Cape. South Africa has around 80 percent of

global high-grade manganese resources and at present there are no similar substitutes available, giving the South African mining industry a significant competitive advantage.

### Charting a path forward

To harness this potential, the challenges facing the African mining industry, both globally and at home, would need to be addressed.

Several global factors are currently driving lower demand for African commodities. For example, the decline in demand for fossil fuels as the world necessarily orientates towards a more sustainable future is driving down prices of mining commodities such as coal and platinum. Moreover, as China moves away from infrastructure development to new technologies such as battery storage, the demand for steel is falling, which could impact Africa's iron ore exports. Additionally, investor sentiment is shifting as risk aversion, particularly in emerging markets, grows. This means that countries like South Africa may have an even tougher task attracting investors due to their relatively high commodity-price volatility and declining regulator perceptions.<sup>24</sup>

The impact of technological advancements such as AI, Big Data, and automation will also become increasingly important in the sector. Such technologies are likely to flatten the cost

**South Africa has around 80 percent of global high-grade manganese resources and at present there are no similar substitutes available.**

<sup>23</sup> Marcelo Azevedo, Nicolo Campagnol, Toralf Hagenbruch, Ken Hoffman, Ajay Lala, Oliver Ramsbottom, "Lithium and cobalt – a tale of two commodities," McKinsey, June 22, 2018.

<sup>24</sup> Stewart Goodman, Agesan Rajagopaul, Ziyad Cassim, "Putting the shine back into South African mining: A path to competitiveness and growth," McKinsey, February 2019.



curve, which will place even more pressure on cost competitiveness across the sector globally. African mines are less mechanized than those in many other regions, and in South Africa, a higher proportion of operations are underground, which means that adopting new technology will be more challenging.

Within this climate, McKinsey has identified four possible areas for action that could help to restore the competitiveness of South African mining in particular and rekindle the long-term growth of the sector and adjacent areas of the economy.

First, it may be necessary to improve productivity to reduce the cost position of key commodities by up to 20 percent. This could be achieved through strengthening organizational health, enabling the frontline with technology, and boosting performance through data. Second, sector stakeholders could redefine the socioeconomic role of mines to deliver sustainable growth in mining communities; specifically, to upskill communities, localize value chains and stimulate alternative industries. Third, the sector could embrace energy disruption to capture a meaningful share of global energy storage markets by stimulating adoption of fuel cells, and investing in vanadium battery storage. Finally, stakeholders could look to unlock high-potential mining assets and double iron ore and manganese production by tapping into the reserves of iron ore and manganese in the Northern Cape.

In looking to future improvements, Botswana is often cited as a best-case example on the continent due to its successful partnership between the government and the private sector in the diamond mining industry. One of the key factors behind Botswana's success in state-owned mining has been its commitment to good governance, transparency, and accountability, having put strong legal and regulatory frameworks in place to ensure that the mining sector is managed in a responsible and sustainable manner, with revenues used to benefit the wider population through investment in health and education.<sup>25</sup>

## Startup economy: The fintech opportunity

Africa is experiencing a digital adoption boom. Over the last ten years, internet use has increased rapidly, enabled by mobile-cellular telephone subscriptions, international bandwidth and 3G (or better) mobile coverage. Both data and internet-enabled devices are getting cheaper, and consumers are increasingly looking to digital solutions to meet their needs.<sup>26</sup>

This surge in digitization was further spurred by the COVID-19 pandemic, creating a fertile environment for new technology players. African startup funding is growing faster than any other market, increasing by over 200 percent between 2020 and 2021 (compared to 90 percent globally). More than half of this (54 percent) is for fintech.<sup>27</sup> While historically access to financial services has been limited on the continent—with around 65 percent of the African market either unbanked or underbanked—a young, growing and fast urbanizing African population is increasingly circumventing traditional channels and going online to buy airtime, transfer funds, and pay their bills.

Fintechs are already major players in the African financial services sector, sometimes even rivalling banks in terms of size and value. There has been an explosion of high-valued fintechs, creating an expanding digital ecosystem that is expected to bring social and economic benefits beyond financial services, including improving access to healthcare, as well as driving social inclusion, particularly among women. But the market has a lot of room left to grow.

McKinsey research projects that Africa's financial services market could grow by eight times to reach around \$230 billion in revenues by 2025. Eleven countries are likely to be at the center of the market's evolution: Cameroon, Côte d'Ivoire, Egypt, Ghana, Kenya, Morocco, Nigeria, Senegal,

<sup>25</sup> Richard Dobbs, Jeremy Oppenheim, Adam Kendall, Fraser Thompson, Martin, Bratt, Fransje van der Marel, "Reverse the curse: Maximizing the potential of resource-driven economies," McKinsey, December 1, 2013.

<sup>26</sup> Max Flototto, Eitan Gold, Tunde Olanrewaju, Uzayr Jeenah, Mayowa Kuyoro, "Fintech in Africa: The end of the beginning," August 30, 2022.

<sup>27</sup> Ibid.

South Africa, Tanzania, and Uganda, which together account for 70 percent of Africa's GDP and half of the population of the continent.<sup>28</sup> These countries also offer fintechs and investors a favorable environment, including increased digital readiness and higher mobile and internet penetration. Forty percent of value in the market is currently concentrated in South Africa, which has the continent's largest and most mature banking system. But the fastest growth is expected from Ghana (15 percent), Francophone West Africa (13 percent), Nigeria and Egypt (both at 12 percent per annum) by 2025.<sup>29</sup>

### Opportunities within the sector

Fintech disruptors are actively developing innovative financial products in eight out of nine product areas: account management, wallets, payments, remittances, retail/SME lending, insurance, wealth management, and blockchain/crypto. And while competition for wallets and mobile money customers is the most intense, African fintech is primed to expand beyond these solutions into more advanced financial services, which offer unique white spaces of opportunity (Exhibit 2).

Since Africa is a vast continent with 54 countries, each with a distinct set of characteristics, opportunities differ greatly across each country and investors would need to take this into account. Advanced economies such as South Africa and

Nigeria are likely to see more white spaces in advanced financial services such as B2B liquidity and regulatory technology such as Anti-Money-Laundering (AML) and Know-Your-Customer (KYC) compliance. Burgeoning fintech markets, such as Egypt, are likely to see more innovation in financial services such as underwriting and servicing claims and assessments in the insurance vertical; Banking-as-a-Service (BaaS) and embedded finance in operations and infrastructure; and buy-now-pay-later services in retail and SME lending.

### Charting a path forward

African fintech faces a number of challenges when looking to scale up in the face of tightening market conditions, which suggests they may need to consolidate and formalize to achieve enduring success. For example, many fintechs are struggling to scale across countries and reach profitability. Markets within Africa vary widely in terms of infrastructure, mobile and internet penetration and payment rails, and this may limit the number of addressable customers available to fintechs. Those aiming to scale need to take this variability into account and tailor their approach to each market within Africa, based on factors such as infrastructure, regulatory frameworks, and customer needs and habits.

In each country, fintechs often also navigate very different regulatory environments as financial

**African financial services are undergoing a structural shift: ~10% of transactions are digital and fintech revenues could grow by 8 times to reach \$30 billion by 2025.**

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<sup>28</sup> Ibid.

<sup>29</sup> Ibid.

**White spaces are emerging across the market, typically in distribution, acquisition, lending, and advanced infrastructure.**

■ White space



Note: List of services is not exhaustive.

<sup>1</sup> Personal Finance Management / Business Financial Management.

<sup>2</sup> Peer to peer.

<sup>3</sup> Individual countries have different regulatory requirements, and this was not considered when assessing white spaces.

<sup>4</sup> Banking as a service.

<sup>5</sup> Anti Money Laundering/ Know Your Customer.

regulatory frameworks in each country evolve at different paces. Regulatory bodies recognize the need to adapt to new products and technologies in order to support the development of an enabling environment, but in general, regulations can be complex and variable and subject to sudden changes. This can make ensuring business continuity and compliance across markets a challenge.

Scarcity of talent and funding are both a reality in the African fintech sector. After record-

breaking fintech investment in 2021, funding is slowing down, especially for later-stage startups, suggesting that fintechs may need to cut costs and boost local participation in venture financing. At the same time, increasing competition for the necessary skills and talent means that companies may need to look to boost their employee value proposition.

Fintechs that wish to navigate these challenges successfully are likely to require world-class corporate governance structures to help them

in difficult times. This includes building a strong positive organizational culture, productive stakeholder engagement, a well-developed compliance foundation, and a clear talent strategy to build the organization's capabilities.

Additionally, stakeholders, including government, investors, the traditional financial services sector, and fintechs themselves can consider a number of actions and work together to improve the prospects of the sector. For example, regulators that have a critical role to play in balancing growth and protecting consumers could formalize data systems, promote predictable regulation, and keep pace with changes in the fintech landscape, while investors could look to expand local opportunities and focus on the tangible value added by startups rather than just on their sale valuation. Fintechs and incumbents could focus on building talent and training for the future as well as looking to build partnerships—with each other as well as with regulators—to build the ecosystems necessary to support fintech growth alongside national development priorities.

## Infrastructure: The opportunity to bring Africa up to speed

Most of Africa lags behind the rest of the world in coverage of key infrastructure classes, including energy, road and rail transportation, and water infrastructure. Nearly 600 million people in sub-Saharan Africa lack access to grid electricity; while India connected 100 million people to electricity in 2018, only 20 million people were connected in Africa.<sup>30</sup> As a result, electricity consumption per person in countries like Ethiopia, Kenya, and Nigeria is less than one-tenth that of the BRIC (Brazil, India and China) countries. Furthermore, the unmet demand looks likely to increase: McKinsey forecasts that

Africa's demand for electricity will quadruple between 2010 and 2040.<sup>31</sup>

Infrastructure investment is rising fast to close these gaps; the number and value of deals in the recent past are increasing, a strong indicator of the continent's potential momentum. McKinsey analysis indicates that Africa's current pipeline of infrastructure projects includes \$2.5 trillion worth of projects estimated to be completed; and African countries themselves are making more effort to close the infrastructure gap.<sup>32</sup> A 2018 report by the Infrastructure Consortium for Africa (ICA) found that between 2013 and 2017, the average annual funding for infrastructure development in Africa was \$77 billion—double the annual average in the first six years of this century. Nearly half of the recent infrastructure investment activity was in West and East Africa, with 27 and 19 percent of the total respectively. The transport and energy sectors together accounted for nearly three-quarters of the total investment. The increased investment has come principally from African governments, which accounted for 42 percent of total funding in 2017.

### Opportunities in the sector

Africa's infrastructure gap creates opportunities for investors. Many African governments face rising debt-to-GDP ratios, which will constrain their infrastructure spending in the years ahead. In sub-Saharan Africa, for example, the median debt-to-GDP ratio exceeds 50 percent—up from 31 percent in 2012.<sup>33</sup> However, international investors have considerable appetite for African infrastructure projects. McKinsey estimates that such investors could have as much as \$550 billion in assets under management. They include government agencies, private-sector pension funds, and investment companies. Investors from the United States account for 38 percent of this potential funding, with significant funding also available from the United Arab Emirates, China, the United Kingdom, and France.

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<sup>30</sup> Kannan Lakmeharan, Harald Poeltner, Qaizer Manji, Ronald Nyairo, "Solving Africa's infrastructure paradox," McKinsey, March 6, 2020.

<sup>31</sup> Ibid.

<sup>32</sup> Ibid.

<sup>33</sup> Ibid.



## Charting a path forward

While significant progress is being made to close this infrastructure gap, infrastructure investment in Africa as a share of GDP has remained at around 3.5 percent per year since 2000—but the McKinsey Global Institute estimated in 2016 that this will need to rise to 4.5 percent if the continent is to close its infrastructure gaps. By way of comparison, China spends about 7.7 percent of GDP on infrastructure and India 5.2 percent. In absolute terms, this means Africa would need to double its annual investment in infrastructure to \$150 billion in 2025.<sup>34</sup>

African countries could look to strengthen partnerships with key development finance partners such as the G7 and Team Europe, a collaboration of the European Union, EU Member States (including their implementing agencies and public development banks), the European Investment Bank (EIB), and the European Bank for Reconstruction and Development (EBRD). The Team Europe approach has become the backbone of Global Europe, the main financial tool for EU international cooperation from 2021 to 2027, which has allocated €29.18 billion for sub-Saharan Africa.<sup>35</sup>

At the same time, it may be necessary for African countries to expand their deal pipeline through the establishment of a long-term master plan that

can bridge political cycles. A shorter-term focus may result in challenges when seeking to develop larger, more impactful projects, as well as limited infrastructure-policy frameworks leading to poor prioritization of infrastructure projects.

Other factors inhibiting infrastructure investment on the continent include weak feasibility studies and business plans—developers and governments may face challenges including the capacity to assess key technical and financial risks associated with large-scale infrastructure projects—delays in obtaining licenses, approvals, and permits, limited ability to secure offtake agreements and guarantees, issues with program delivery, and limited ability to agree on risk allocations. This is a result of skill gaps in quantifying and correctly allocating risks to their natural owners—a challenge that persists in even the most sophisticated public agencies worldwide. Another common problem can be an excessive focus on risk avoidance as opposed to risk management, adaptation, and mitigation.

African governments and their institutional partners have an opportunity to take decisive action to address these issues and improve the commercial viability of projects. Such opportunities include helping to mitigate political, currency, and regulatory risks, and increasing the deal flow of bankable projects. Two key steps

**Infrastructure investment in Africa as a share of GDP has remained at around 3.5 percent per year since 2000—but this will need to rise to 4.5 percent if the continent is to close its infrastructure gaps.**

<sup>34</sup> Ibid.

<sup>35</sup> “Global Europe: Neighbourhood, Development and International Cooperation Instrument,” European Commission website.

could include reallocating financing to prevent the crowding out of private-sector financing and strengthening collaboration with national or multilateral financial institutions to leverage critical skills in areas such as transaction support, planning, and risk allocation.<sup>36</sup>

## Agriculture: The opportunity to transform agro- food systems

Agriculture plays a pivotal role in Africa's social and economic landscape. Smallholder farmers make up more than 60 percent of sub-Saharan Africa's population, with about 23 percent of the region's GDP deriving from agriculture.<sup>37</sup> Yet, the sector holds immense potential for further growth and development. Factors such as market access, population density, and agro-ecological conditions, suggest that up to 30 million hectares of additional cropland in the region, concentrated primarily in nine countries, is readily cultivatable today.<sup>38</sup> This would increase Africa's cultivated land by up to 10 percent, which could grow still further as new infrastructure investments open currently inaccessible areas for farming.

Furthermore, demographic trends, such as rising urbanization and the growth of urban middle-class consumers in Africa, point to a large and growing market for agricultural products that may drive increased demand in the future. And the acceleration of digital penetration also indicates an opportunity for the development and utilization of digital tools to help transform African agri-food systems with the view to enhancing food security and expanding the sector.<sup>39</sup>

McKinsey analysis indicates that the growth of the middle-class urban market alone could lead to a

\$645 billion rise in consumer spending between 2015 and 2025. Of that, \$167 billion could be in food and beverages, a majority of which would come from sub-Saharan countries.<sup>40</sup> While the number of medium-sized farms is rising to meet this need, increased smallholder productivity will be the biggest driver of growth in this sector. The continent could increase its production of cereals and grains by up to three times if it intensified its agricultural productivity through yield improvement, land expansion, and reduced post-harvest losses, adding 20 percent more cereals and grains to the current global output of 2.6 billion tons. Similar increases could also be achieved in the production of horticulture crops and livestock.<sup>41</sup>

### Opportunities in the sector

McKinsey analysis of agricultural productivity potential across 44 countries in sub-Saharan Africa showed that nine countries make up 60 percent of the total potential, with three countries—Ethiopia, Nigeria, and Tanzania—comprising half of that.<sup>42</sup> While this is highly concentrated, the significant variation in agricultural development and policy across these regions means differentiated approaches are required to unlock growth in each market.

Having identified these high-potential countries, the analysis suggests that the focus could be on enhancing smallholder productivity. The majority of agricultural land in Africa is still held by smallholder farmers with less than five hectares of land. However, their productivity is frequently constrained by limited access to the financing, technology, and markets that could help them to increase output and boost rural economic development while helping to improve food security. There is also an opportunity to improve the cost competitiveness of Africa's domestic food crops relative to food imports. Some regions in Africa do already hold an advantage in cash crops like cashews, processed horticulture, tea, coffee, and cocoa, which have among the lowest production costs in the world. The same

<sup>36</sup> Kannan Lakmeharan, Harald Poeltner, Qaizer Manji, Ronald Nyairo, "Solving Africa's infrastructure paradox," McKinsey, March 6, 2020.

<sup>37</sup> Lutz Goedde, Amandla Ooko-Ombaka, and Gillian Pais, "Winning in Africa's agricultural market," McKinsey, February 19, 2019.

<sup>38</sup> Ibid.

<sup>39</sup> "How digital tools can help transform African agri-food systems," McKinsey, March 8, 2021.

<sup>40</sup> Lutz Goedde, Amandla Ooko-Ombaka, and Gillian Pais, "Winning in Africa's agricultural market," McKinsey, February 19, 2019.

<sup>41</sup> Ibid.

<sup>42</sup> Ibid.

is not true for many African food crops, which have relatively higher production costs than imported food crops that are mostly produced on a larger scale in countries with more advanced agricultural systems.

### Charting a path forward

Unlocking Africa's agro-processing potential comes with significant challenges. The cost competitiveness of crops is sometimes impacted by a highly fragmented supply chain, with inputs often changing hands at least three times before they reach the farmer. The result is a markup of up to 50 percent over import prices, with about one-third to one-half of that captured as margin by the distributors and retailers in the chain.<sup>43</sup>

Furthermore, the impact of climate change and extreme weather events is a growing threat. As temperatures and the frequency and severity of extreme events increase, rainfall patterns are projected to shift more than they already have. Beyond this, climate change's indirect effects can cause harm too. The health of livestock, for example, is at risk from extreme heat, changes in the quantity and quality of forage, and the availability of water. Climate change also alters the evolution and movement of pests and diseases and can weaken the defenses of crops and livestock.

Additionally, while other regions have implemented mitigation and adaptation strategies—such as crop insurance, government welfare plans, guaranteed offtake—these have not been widely implemented in Africa.

To overcome these challenges, heavy investment in the inputs and infrastructure to boost productivity is likely to be required. McKinsey analysis indicates that sub-Saharan Africa will need eight times more fertilizer, six times more high-quality seed, at least \$8 billion of investment in basic storage for about 70 percent of grain production, and as much as \$65 billion in irrigation to fulfill its agricultural promise.<sup>44</sup> Roads, ports, and electricity would also need to be developed, along with improvements in policies and regional trade flows, as well as development of different offtake markets within value chains.

McKinsey proposes seven considerations when deciding where to focus resources and investment going forward (Exhibit 3). Given the diversity of African countries and the potential scale of investment required, prioritizing a few countries and value chains on which to concentrate resources could be a more efficient approach to drive improvements in the sector. Within these countries, it may also be essential to tailor actions to local preferences and needs. Segmentation can help to understand buying

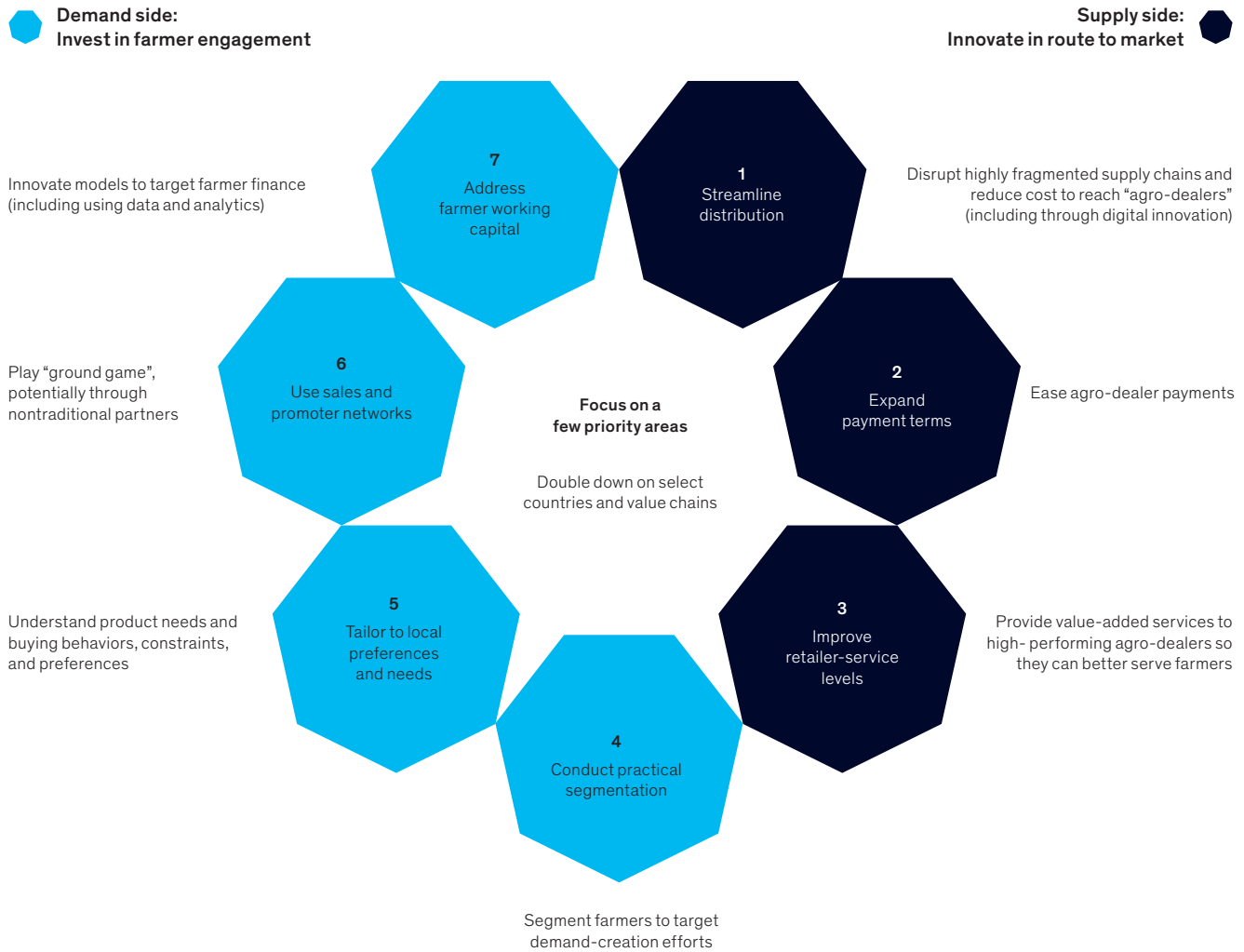
**Smallholder farmers make up more than 60 percent of sub-Saharan Africa's population, with about 23 percent of the region's GDP deriving from agriculture.**

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<sup>43</sup> Ibid.

<sup>44</sup> Ibid.

## Seven lessons can help unlock Africa’s agriculture potential.



Source: Lutz Goedde, Amandla Ooko-Ombaka, and Gillian Pais, “Winning in Africa’s agricultural market,” McKinsey, February 19, 2019.

behavior, constraints and preferences. For instance, smaller pack sizes for inputs may make it more affordable for smallholder farmers who cannot purchase larger packs.

Access to credit also has an important role to play. Nominal interest rates in sub-Saharan Africa are among the highest in the world, but connecting small farmers and agro-dealers—which play a critical role in the last-mile value chain—with longer term, cheaper loans could give them access to the capital they need to grow.

Overall, costs may be reduced and output value increased through streamlining and expanding distribution. One way this could be achieved is through gaining greater control of the distribution

chain, maintaining ownership of the inventory in rural aggregation points, and sharing the costs of distribution and warehousing with other input companies. Digital technologies may also be useful here—providing real-time information, and improving logistics and supply chain management as well as aiding planning efforts to spot and mitigate the effects of climate change.

Finally, it may be useful to consider using nontraditional partners to drive demand of agricultural produce. Sales and promoter networks can provide access to new markets, increase visibility and foster valuable partnerships to drive demand for African agricultural products.



# Healthcare and pharmaceuticals: The opportunity to build a healthy Africa.

A combination of technological and environmental factors is driving the potential of the pharmaceutical sector in Africa. While the COVID-19 pandemic highlighted gaps in healthcare systems on the continent and the shortfall in healthcare capacity, it also accelerated digital penetration, opening potential for digital solutions to not only improve countries' responses to infectious-disease threats, but also to strengthen primary healthcare systems.<sup>45</sup>

Furthermore, since almost 99 percent of Africa's routine vaccines are imported, there is renewed focus on the possibility of the continent producing its own vaccines.<sup>46</sup> This is a move that could reduce Africa's dependency on imports and reap significant social benefits by strengthening public-health resilience and pandemic preparedness, ensuring that the spread of disease can be addressed more rapidly. Home-grown vaccine manufacture could also lessen the strain on the continent's trade balances, improve the skilled labor pool, and ease foreign exchange requirements.

Historically, the vaccine manufacturing industry in Africa has been curtailed by several factors, including cost concerns, inconsistent access to capital and uncertainty about demand. Today, however, critical factors spurred by the pandemic may be changing the calculus. For example, there are currently significant gaps in the continent's vaccination programs, with more than 9.4 million children in Africa not completing their recommended vaccine schedules each year.<sup>47</sup> Closing these gaps would alter the economics of vaccine manufacturing and distribution.

## Opportunities within the sector

The production and distribution of vaccines is clearly a prime opportunity for investors in the healthcare sector.

African vaccine manufacturing is receiving deepening political and regulatory support including increased commitments from African and global leaders in steering the local vaccine-manufacturing agenda, improving regionalization, and the integration of vaccine markets across the continent. The economics of African vaccine manufacturing are also now more feasible—the pace of technological innovation seen in recent years at every step of the vaccine-development and manufacturing value chain are bringing production costs ever lower. For instance, small-scale disposable technologies, high-density bioreactors, and innovation in fill-and-finish steps are boosting yields and have the potential to change the business case for newer entrants.

Continued efforts to expand vaccine coverage and access, as well as the introduction of new vaccine products, will likely further boost demand. And demographic shifts, like fast-growing populations and rapid urbanization are also expected to increase demand and improve access. As a result, some scenarios project that Africa's vaccine market could double in value by 2030, rising from \$1.3 billion today to between \$2.3 billion and \$5.4 billion by 2030.<sup>48</sup>

In addition, the opportunity to leverage digital solutions to improve African populations' access to healthcare is wide open. Strengthening and broadening the use of digital tools across multiple use cases in primary healthcare could contribute towards both shaping the national healthcare ecosystem, connecting multiple healthcare journeys, and aggregating data for seamless user experiences. Here, the focus could be on known, adaptable technologies and user-centered design, adapting the models and products of existing technology.

<sup>45</sup> Molly Bode, Tristan Goodrich, Marilyn Kimeu, Peter Okebukola, Matt Wilson, "Unlocking digital healthcare in lower-and middle-income countries," McKinsey, November 10, 2021.

<sup>46</sup> Andrea Gennari, Tania Holt, Emma Jordi, Leah Kaplow, "Africa needs vaccines. What would it take to make them here?" McKinsey, April 14, 2021.

<sup>47</sup> Ibid.

<sup>48</sup> Andrea Gennari, Tania Holt, Emma Jordi, Leah Kaplow, "Africa needs vaccines. What would it take to make them here?" McKinsey, April 14, 2021.

## Charting a path forward

The current primary healthcare landscapes of most African countries are characterized by fragmented solutions. The variability and unique characteristics of each country or region determine the types of challenges that may affect which digital tools are leveraged for improved healthcare access. This variability, which includes factors such as digital readiness and a country's leadership and governance, makes growth-at-scale more complex.

To realize the promise of digital healthcare at scale, strong country-led partnerships and enabling environments will likely be required. African countries could focus on effective capability building, sustainable business models, and rigorous monitoring and evaluation systems to support growth and collaboration in this area.

Similarly, African vaccine manufacturing is currently constrained by a variety of factors including manufacturing restrictions created by the Trade-Related Intellectual Property Rights agreement (TRIPS), which currently provides strong protection of intellectual property rights, preventing developing nations from producing vaccines without the patent holder's consent. For African-owned vaccine manufacturing potential to be unlocked, a loosening or waiver of certain provisions of TRIPS may be needed, something that many non-African governments are still reluctant to do.<sup>49</sup>

Furthermore, many African regulators may still lack the capacity and capabilities to regulate local vaccine production effectively. By focusing efforts on achieving continental, national, and regional coordination aligned along a clear purpose, African countries could build vigorous, well-funded emergency preparedness and response mechanisms, supported with consumer-centric digital health ecosystems. Proper investment and nationwide reach would be the lynchpins of a well-designed rapid-response system.

The role of the private sector in vaccine manufacturing could also be pivotal. Private-sector companies have historically experienced challenges in securing long-term patient capital for vaccine manufacturing because of perceptions of high risk and uncertainty about the business case, largely driven by high capital requirements, the need for secured offtake, and technological challenges involved. In part, this is due to the economics of vaccine manufacturing requiring reliable demand for large volumes to support production at scale. Vaccine manufacturing also requires a significant step up in skills compared with other pharmaceutical manufacturing. Vaccine expertise is scarce in Africa and the continent largely relies on experts from foreign manufacturers through technology-transfer programs.

To address these challenges and develop robust healthcare systems in Africa, efforts could focus

**Africa's vaccine market could double in value by 2030, rising from \$1.3 billion today to between \$2.3 billion and \$5.4 billion by 2030.**

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<sup>49</sup> "TRIPS Council welcomes MC122 TRIPS waiver decision, discusses possible extension," World Trade Organization, July 6, 2022.

on prioritizing a national healthcare ecosystem that enables data flow and fosters collaboration among key stakeholders to improve the delivery of healthcare to the population. Technological solutions and data can provide multiple benefits, including expansion of healthcare coverage, as well as using data sharing to enhance the quality of services and coordination of care that provides a convenient and seamless user experience. Data

and analytics for evidence-based guidelines could also enhance the quality of professionals in the sector, and using predictive analytics could help to optimize resources to detect risks earlier. This could also have a significant impact on management efficiency in the near term by allowing increased division of labor and overall utilization through centralized, coordinated and real-time management.

# Collaboration is a common theme

Africa's potential for economic growth and development is not in dispute. With solid growth indicators—including a young, growing and urbanizing population, a rich seam of untapped resources, and under-developed markets—and identified opportunities across at least six sectors, the question is how and when to tap into this potential.

For decades, private companies, investors, and government leaders in key sectors have overlooked key investment opportunities on the continent, but a confluence of circumstances—not least of which are new pressures to diversify energy supplies, decarbonize economies, and near-shore supply chains—may be changing the calculation in key sectors.

Greater and more targeted investment both in terms of capital and expertise has the potential to spur economic growth, create jobs, and drive development across the continent, while also delivering benefits such as diversification of trade and the potential for high returns. Unlocking this opportunity in the six sectors discussed in this whitepaper is a complex undertaking and different factors would need to align in different sectors and countries. Africa's economic and social landscape is diverse, with uneven levels of digital penetration and varied regulatory requirements which may create

challenges for the achievement of growth-at-scale, while governance structures that create an uncertain business environment in some countries may limit investor confidence. Furthermore, the agriculture sector grapples with low productivity and limited access to markets, while other sectors, such as healthcare and green energy, face challenges such as limited infrastructure and the absence of a skilled workforce.


However, a common theme emerging across all sectors is collaboration. The scale and complexity of the task ahead requires that all stakeholders are aligned and working toward a common goal: private-sector players that bring large-scale capital and expertise; governments, which have the responsibility of creating an enabling environment; civil society, which is key to ensuring that benefits flow to local communities and facilitating a just transition; and industry players along the entire value chain in each sector that will be engaged in the day-to-day operations.

With creative partnerships, capital investment and the right level of commitment and support, stakeholders can unlock significant potential, bringing jobs and enhanced competitiveness to African economies, and helping ensure that the continent thrives in a new global landscape.

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A decorative graphic consisting of numerous thin, light blue lines that originate from a single point on the right edge of the page and fan out towards the left, creating a sense of depth and movement. The lines are evenly spaced and extend across the entire width of the page, with some lines being slightly longer than others, creating a dynamic, abstract pattern.