WHITE & CASE

Summer 2023

Africa Focus

Delivering growth through sustainable development

Contents

Growth through sustainable development

Recent disruptions in the global food supply chains have highlighted Africa's urgent need to become self-sufficient in food production. Traditionally, the continent has turned to small-scale community-based agricultural projects as a means to meet its food needs. But feeding a population of more than 1.2 billion people requires more than communal farming; it calls for a paradigm shift toward agriculture on an industrial scale. Our milestone tenth edition of *Africa Focus* opens with an article exploring obstacles to large-scale farming in Africa and how they may be overcome to secure funding required for such agricultural megaprojects.

While Angola has entered an ambitious plan to diversify its economy, it remains heavily dependent on its oil & gas industry. Hydrocarbon revenues are crucial for funding Angola's commitments under the Paris Agreement, but also for diversifying the country's economy and improving the livelihoods of its citizens. Our second article looks at the latest developments in Angola's oil & gas sector, including increased M&A activity and a three-well offshore exploration project at a depth of 3,628 meters (11,903 feet) below mean sea level—a new world record water depth set in 2021.

Africa is home to many of the world's most biodiverse regions, including eight of the 36 recognized global biodiversity hotspots. The Congo rainforests have also overtaken the Amazon as the most significant carbon sink on Earth. Our third article highlights the scale of the challenge of biodiversity protection in Africa and options to fund it.

Trade ties between Africa and the United States are seeing something of a revival as the US seeks to revitalize its economic engagement on the continent. The US African Growth and Opportunity Act (AGOA) is one such pivotal agreement that is due to go before the US Congress in 2025.

Africa holds a remarkable 30 percent of the world's mineral reserves, yet it only accounted for less than 10 percent of global mining exploration spending and less than 5 percent of the sector's global revenue in 2022. Many of Africa's minerals are vital for reducing carbon emissions and transitioning to renewable energy. Developing these reserves sustainably is crucial for Africa's economies. Our final article examines how mining companies across Africa continue to find financing for the development of their projects.

Mukund Dhar
Partner, White & Case LLP

Colorful circles of agriculture, Pretoria, South Africa

Farmworker in the field at sunset, Luanda, Angola

Africa's agricultural revolution: From self-sufficiency to global food powerhouse

Among its many intricately interlinked challenges, Africa faces burgeoning cities and increasing numbers of rural mouths to feed. But these challenges are not insurmountable: With agriculture at the core of the continent's economic transformation, Africa has the potential to become a global agricultural powerhouse and a net exporter of food. **Gareth Hodder**, **Brenda Migwalla** and **Stephen Pickup**, Head of Agriculture at Traditum Private Equity, ask what it would take to unlock this potential.

Africa has 60 percent of the world's uncultivated arable land. The agriculture sector accounts for 35 percent of Africa's GDP and employs more Africans than any other sector. So why does Africa spend a staggering US$78 billion of scarce foreign currency on food imports each year, with some countries such as Zimbabwe, Guinea and Sudan exceeding 100 percent of their annual foreign currency receipts? Why in 2020 did more than 20 percent of Africans face hunger—a figure twice as high as any other region in the world? Why is it that approximately 80 percent of the continent's food supply still comes from small-scale farmers, many still practicing subsistence agriculture?

The 2030 Agenda adopted by the United Nations General Assembly on September 25, 2015, notes the need to "devote resources to developing rural areas and sustainable agriculture and fisheries…"; to "account for population trends in national, rural and urban development strategies and policies"; to "increase investment in rural infrastructure, agricultural research"; and to "support a positive economic, social and environmental link between urban, peri-urban and rural areas". Agricultural aspirations for Africa are set out further by the African Union (AU) "Agenda 2063: The Africa We Want," which calls for accelerated agricultural growth and transformation, leading to shared prosperity and improved livelihoods. Although such global and pan-African statements of intent are crucial, they must be followed by concrete national regulations and policies if African agriculture is to attract the scale of investment required to become a net exporter of food.

Among many other intricately interlinked challenges, Africa faces burgeoning cities and increasing numbers of rural mouths to feed. Between 1990 and 2021, the rural population of sub-Saharan Africa experienced a shift in both proportion and magnitude. While the percentage of the rural population decreased from 72 percent to 58 percent over the period, the actual number of rural residents increased significantly, surging from 374.5 million to 687 million.

These challenges are not insurmountable, though. Africa has the potential to be a global agricultural powerhouse and a net exporter of food, with agriculture being a core driver of the continent's economic transformation. According to the African Development Bank, Africa's food and agriculture market could increase from US$280 billion a year in 2023 to US$1 trillion by 2030. But what would it take for Africa to emerge as a prominent global agricultural force? There are six levers that, when applied collectively, can trigger the agricultural renaissance in Africa that is necessary to achieve this vision.

US$1 trillion

Africa's food and agriculture market could increase from US$280 billion a year in 2023 to US$1 trillion by 2030

Source: African Development Bank

> **With agriculture at the core of Africa's economic transformation, the continent has the potential to become a global agricultural powerhouse and a net exporter of food**

Six key levers that collectively can ignite Africa's agricultural renaissance

1. Shifting legislation and policies to support a wider range of agricultural projects

Governments have a crucial role to play in the creation of a regulatory environment, incentivizing the development of large-scale commercial farming using cutting-edge technologies while also supporting small-scale farmers to improve their productivity and competitiveness in the market.

2. Improving access to capital for the private sector

Creating an environment attractive to private sector investors by developing bankable business cases and managing investment risks through improved local financing capacity, and leveraging opportunities for sustainable finance instruments such as social bonds and loans, blended finance and impact investing.

3. Addressing the infrastructure gap

Reliance on outdated, poorly maintained—or even nonexistent—infrastructure inhibits productivity and access to market. Infrastructure needs to be improved to the point at which seed, fertilizer, equipment and other production necessities—manufactured in Africa—can be transported to farms.

4. Resolving supply chain issues

Supply chain costs, corruption and rent-seeking by third parties hinder African agriculture, but innovative solutions such as geospatial mapping, integrated supply chains and collaboration with supermarket chains can be part of the solution. A comprehensive overhaul of both upstream and downstream supply chains is necessary to add millions of tons of new cereal.

5. Improving productivity of small-scale farmers

Small-scale farmers are essential to African agriculture, but they need improved access to irrigation, technology and support for storage and transportation. Small-scale agricultural operations have very direct links to community upliftment and, with the appropriate institutional and advisory support, such projects offer viable opportunities for sustainable finance instruments.

6. Adapting to climate change

Adapting Africa’s food systems to climate change is an imperative, not a choice. More ambitious and innovative adaptation interventions, research and pragmatic planning are crucial to addressing agricultural challenges in the face of water scarcity. Significant improvements in productivity will reduce the need to cultivate vast tracts of virgin land in order to meet the continent’s demands.

Shifting legislation and policies to support a wider range of agricultural projects

An African agricultural renaissance will require a shift in national development policies from supporting a small number of mostly export-focused crops—cotton, cocoa beans and coffee—to prioritizing a wider range of agricultural products for consumption on the continent. Agricultural exports are crucial, as they generate valuable foreign currency. A significant portion of Africa’s cross-border trade is between African countries, which is also vital in fostering pan-African food security. In 2018, intra-African trade accounted for 15 percent of exports and, in turn, 15 percent of that was in agricultural products. The African Continental Free Trade Area (AfCFTA), established in that same year, will—in time—no doubt significantly enhance this flow of agricultural products across African borders. Improved customs processes at border crossings will help minimize the volume of produce spoiling in transit. Moreover, processing such exported goods locally rather than exporting raw products would increase revenues and create new job opportunities.

Improving access to capital for the private sector

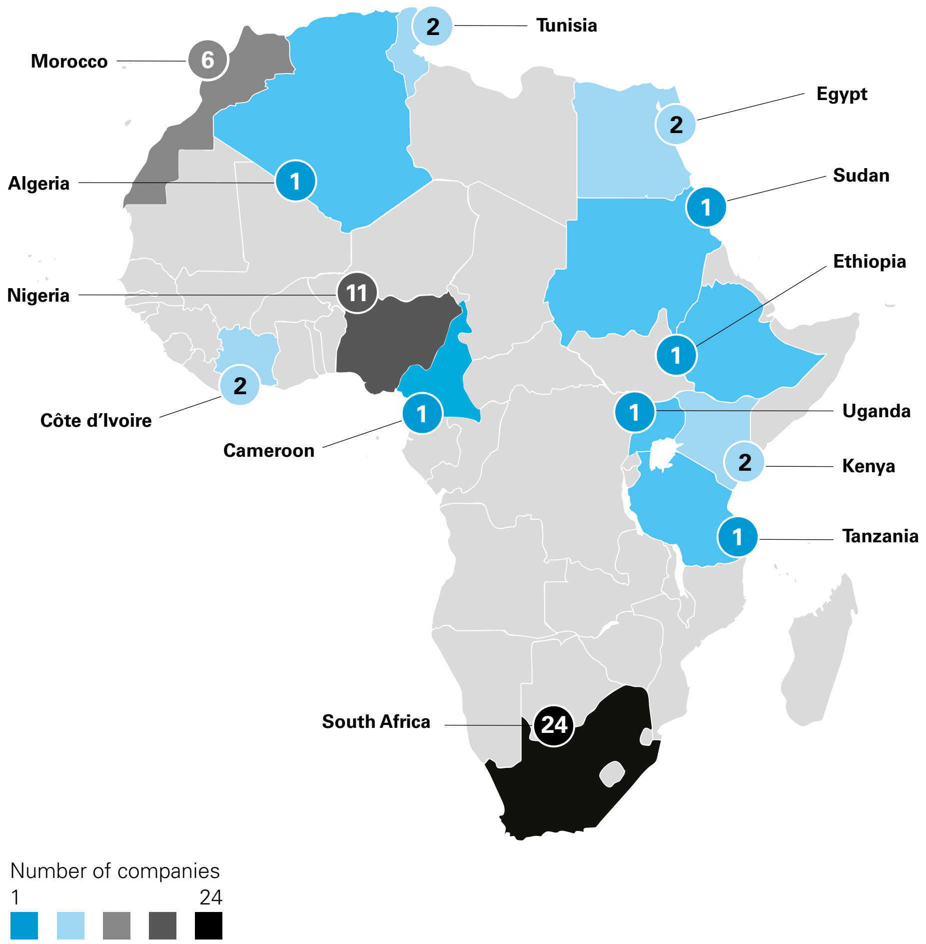
The COVID-19 pandemic wreaked havoc upon Africa’s fiscal health, but it has not diminished the needs of the continent’s agricultural sector or the urgency for them to be effectively met. Through the Comprehensive African Agricultural Development Programme (CAADP), African Union member states committed to a minimum of 10 percent of their government expenditure toward agriculture. In 2021, however, the average government expenditure on agriculture in Africa stood at a mere 4.1 percent.

Access to credit is a major impediment to private sector investment in African agriculture. According to the African Development Bank, the estimated current financing shortfall ranges between US$27 billion and US$65 billion annually. Even more direly, the Commercial Agriculture for Smallholders and Agribusiness (CASA) program—a flagship initiative of the UK Foreign, Commonwealth

US$78 billion

Africa spends a staggering US$78 billion of scarce foreign currency on food imports each year

Location of Africa's largest indigenous companies with US$500+ million annual revenues in the agriculture & food value chain



Source: AsokoInsight

& Development Office—estimates the financing gap to be in excess of US$1 billion, based on the demand of US$160 billion, minus the current provision of US$54 billion by banks, impact investors and other financial intermediaries.

Impact investors also play important roles. According to Philippa Viljoen of the impact investment firm InfraCo Africa, "Impact investors being involved not only encourages new investors to come in, but they have capacity to support developers to bring about design improvements that commercial financial institutions cannot. This can make the difference between a project being bankable, or not."

The CASA report proposes four long-term strategies to bridge the funding gap: (i) grow more small agribusinesses into commercially viable projects to anchor local bank financing; (ii) develop capacity, incentives and infrastructure for local banks and funds to profitably support smaller, less commercial agribusinesses; (iii) enhance the effectiveness of blended finance instruments; and (iv) build infrastructure around climate finance. These strategies are enormous both in scope and in scale. Transforming them into tangible reality will depend heavily on coordinated action from stakeholders within the agricultural finance ecosystem.

Small-scale agricultural operations have very direct links to community upliftment. With the appropriate institutional and advisory support

4.1%

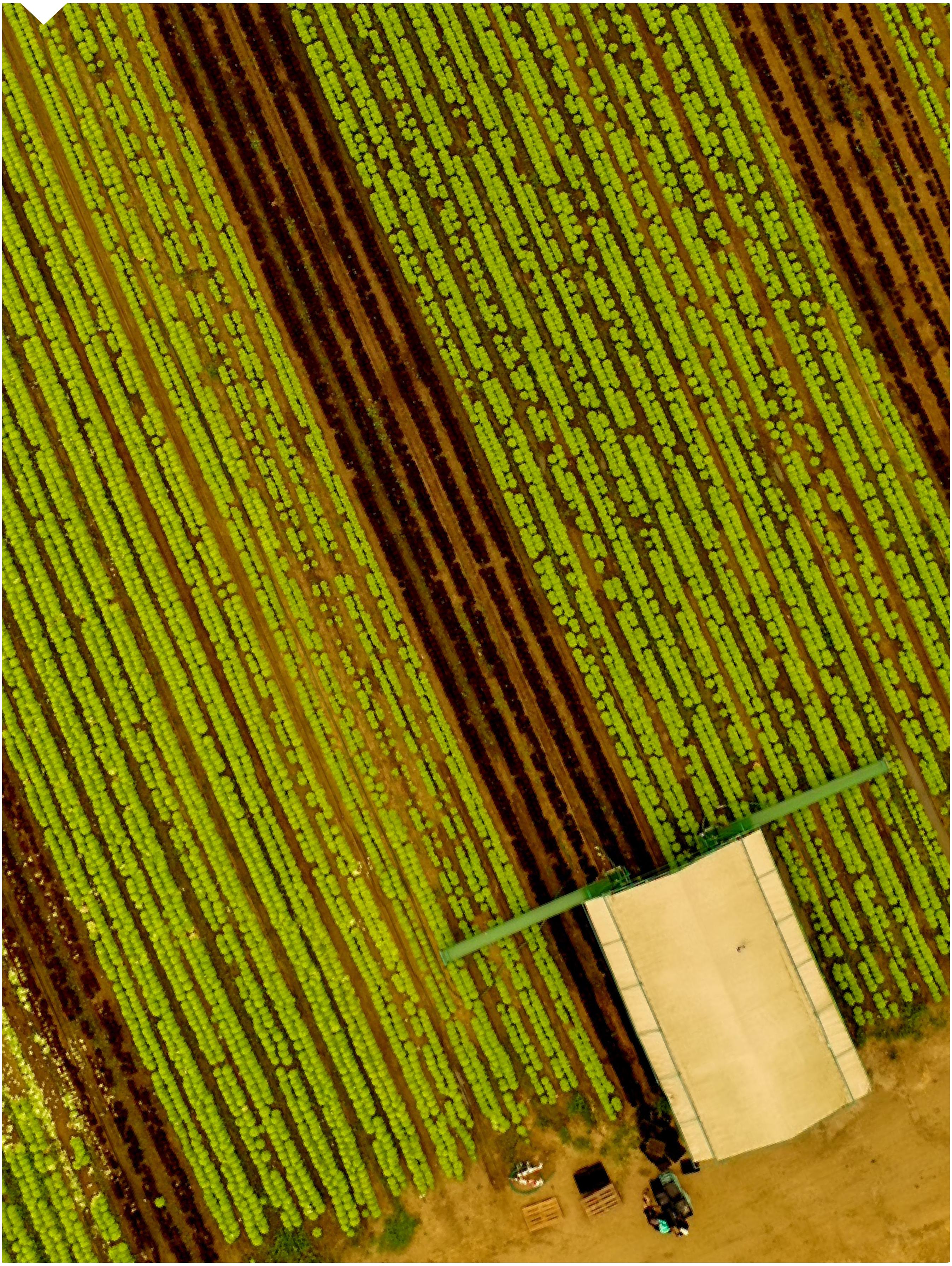
In 2021, the average government expenditure on agriculture in Africa stood at a mere 4.1 percent

and compelling business cases, such projects offer viable opportunities for sustainable finance instruments such as social bonds and loans, blended finance and impact investing, and can become attractive investment options for institutional investors.

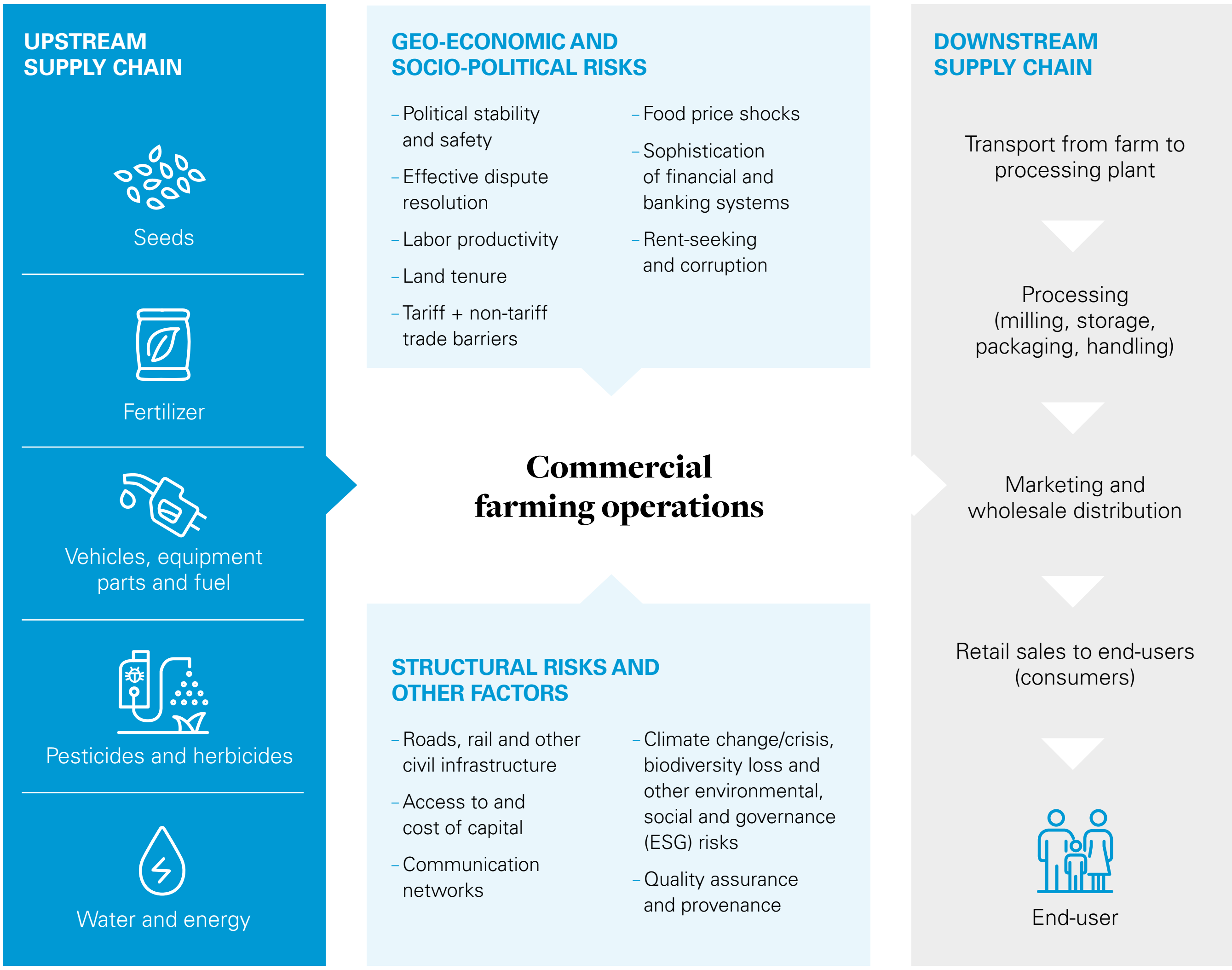
Within Africa's agriculture and food & beverage sectors, there are currently 56 companies with annual revenues above US$500 million, of which 14 companies have turnovers in excess of US$1 billion. Such larger-scale agro-industrial enterprises are better placed to attract their own capital, and their future seems bright. Some of the world's largest agriculture companies—including the three biggest players, Cargill, ADM and Bayer—also have significant operations in Africa.

"Impact investors being involved not only encourages new investors to come in, but they have capacity to support developers to bring about design improvements that commercial financial institutions cannot

Agricultural field
in Africa



Modern commercial agriculture, at scale in Africa, will require enhancement of all aspects of the value chain



Addressing the infrastructure gap

The infrastructure gap in Africa is well documented, and it impacts agriculture as significantly as it does other sectors. The reliance on outdated, poorly maintained—or even nonexistent—infrastructure inhibits productivity at least as much as other institutional challenges, such as weak governance, onerous regulation and lack of access to finance.

Poor road, rail and harbor infrastructure hinders farmers from being able to get their goods to market, and adds as much as 30 to 40 percent to the costs of goods traded among African countries. While investment in African infrastructure projects has seen a general increase in recent decades, the reality remains that fewer than 10 percent of infrastructure projects in Africa reach financial close, with 80 percent failing at the feasibility and business plan stage. Lack of clarity about the commercial viability, political and currency risk, counterparty and regulatory risk, and lack of exit opportunities are all factors in such a high rate of failure.

Involvement of credible development finance institutions provides assurance that due diligence has been rigorous and the overall approach prudent, which enhances the probability of closure, and proper risk mitigation instruments help improve the credit rating of the borrower, hence the cost of finance.

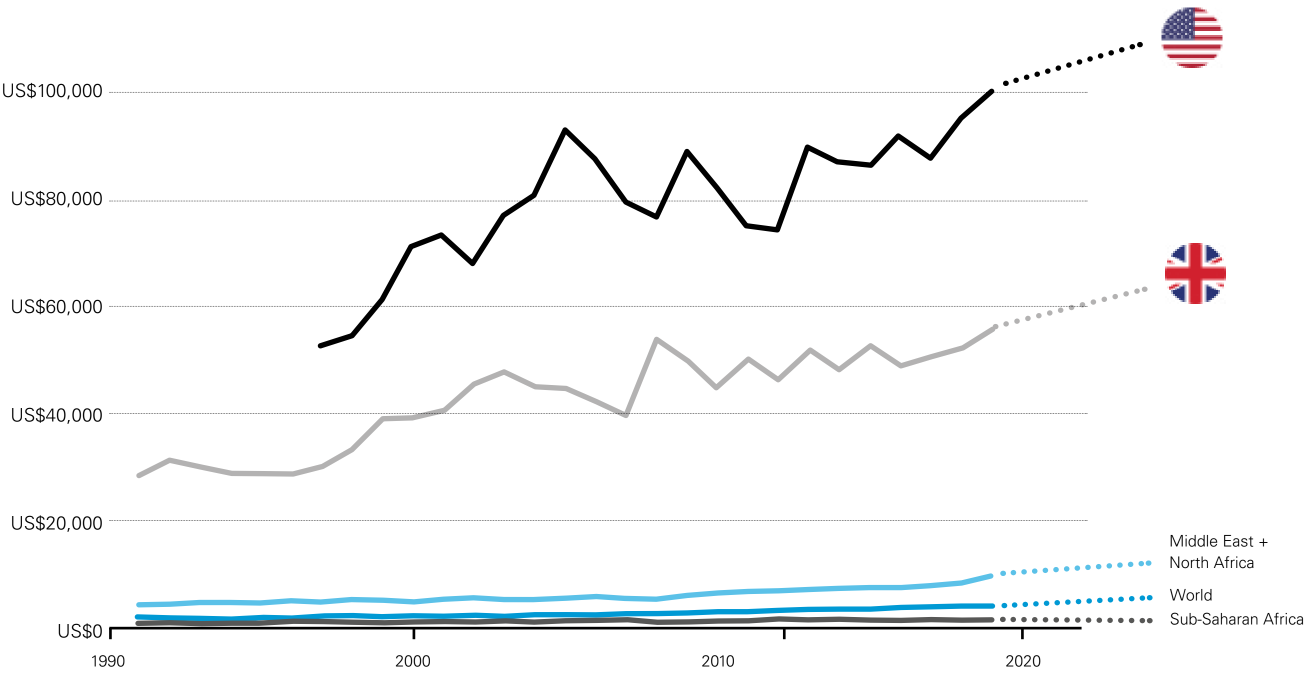
30–40%

Additional cost to goods traded between African countries because of poor road, rail and harbor infrastructure

Resolving supply chain issues

Supply chain costs and related issues are a major obstacle to the renaissance of African agriculture. Making food supply chains more efficient and profitable requires reliable and efficient delivery of upstream goods and services, as well as downstream delivery of the goods to market. One notable example is Releaf, a Lagos-based company that uses cutting-edge technologies, including geospatial mapping, to identify optimal locations for supply chain infrastructure and to bring processing capacity directly to palm nut farmers in Nigeria, eliminating the need for these farmers to rely on large factories, located too far away to be affordably reached.

Agriculture value added per worker 1991 to 2019, projected to current



Agriculture value added per worker is calculated by dividing the amount of economic value generated from farming, forestry and fishing by the number of people working in those sectors. The figures appear in constant 2015 US dollars but not adjusted for purchasing power parity between the countries/regions.

Sources: World Bank; Our World in Data

Rent-seeking by third parties—which can sometimes extend to corruption—can increase the costs of doing business, both upstream and downstream, and discourage investment into African agriculture projects.

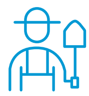
While regulatory reform and institutional enhancement will help reduce such practices, some large-scale farming enterprises have resorted to resolving this challenge through vertical integration of upstream and downstream supply chain components into their own businesses, rather than relying on external parties. The emergence of large-scale supermarket chains working directly with their suppliers to improve supply chain efficiencies is also helping to alleviate some of the downstream challenges.

Improving productivity of small-scale farmers

Small-scale farmers will remain crucial to African agriculture for years to come, but they are facing significant pressures. Both small- and medium-scale farming enterprises are focusing almost exclusively on markets immediately local to them. These farmers need better access to irrigation and technology to improve their productivity and farming practices. Small-scale farmers also need support in storing and transporting their produce to market. Centralized entities that are properly managed—rather than individual farmers themselves—would be far better positioned to attract funding and deliver results.

Adapting to climate change

Adapting Africa's food systems to climate change is an imperative, not a choice. If global temperatures rise by 2° to 3° Celsius above pre-industrial levels, as current trends suggest, disruption to African food security will be profound—potentially catastrophic—for those already struggling with hunger. Even on the 1.5° Celsius trajectory proposed by the Intergovernmental Panel on Climate Change (IPCC) as a maximum, more ambitious and innovative adaptation interventions are needed to avoid widespread famine and forced migration in coming decades. Research and planning are required to assess how Africa's food security is to be achieved amid diminished agricultural potential, particularly in the face of water scarcity.



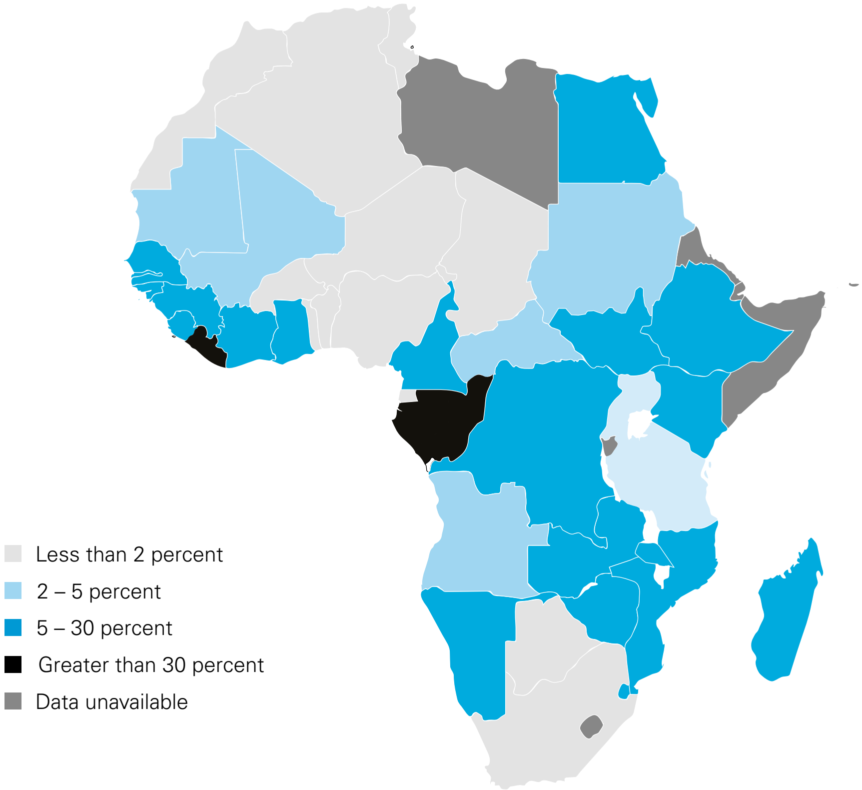
US$ 1,526

The agricultural value added per farmworker in sub-Saharan Africa was a mere US$1,526 in 2019, in stark contrast with that of a US farmworker, which exceeded US$100,000

From self-sufficiency to global food powerhouse

Russia's invasion of Ukraine has had a devastating impact on Africa's food security, and has triggered a shortage of at least 30 million tons of food across the continent, especially wheat, maize and soybeans. Just replacing the 30 million tons of cereals that have been displaced due to the situation in Ukraine means approximately 36,000 square kilometers of farmland would be needed if Africa were to achieve the same cereal yield of 8.27 tons per hectare as in the US.

Amount of long-leased (typically to foreign entities) as a percentage of all arable land



Source: United Nations Conference on Trade and Development (UNCTAD)

However, at Africa's current cereal yield of 1.75 tons per hectare, the required farmland would exceed a staggering 171,000 square kilometers. Improving yield is a key priority.

Enabling Africa to feed itself and realize its potential of becoming a global agricultural powerhouse requires development of large-scale commercial farming using cutting-edge technologies. It also requires effective support to small-scale farmers to enhance their production and competitiveness in the market. These need not be conflicting priorities. The challenges are significant but not insurmountable.

This implies mechanization on a grand scale. In 2019, the agricultural value added per farmworker in the US exceeded US$100,000. In sub-Saharan Africa, it amounted to a mere US$1,526. Over the past three decades, Africa tripled its cereal production. But its yield barely increased, with almost all the growth resulting from the expansion of cultivation areas. This stands in stark contrast to Southeast Asia, which has also significantly increased its cereal output, but the gains have been almost entirely through yield improvement. Significant improvements in productivity will also benefit Africa's biodiversity, as it will reduce the need to cultivate vast tracts of virgin land in order to meet the continent's demands.

A comprehensive overhaul of both upstream and downstream supply chains will be necessary to add tens or hundreds of millions of tons of new cereal production in Africa. Infrastructure will need to be improved to the point at which seed, fertilizer, equipment and other production necessities can be transported to farms. Ideally, these agricultural necessities should be manufactured in Africa, requiring the construction of new factories with their own supply chains. Downstream, infrastructure bottlenecks must be cleared to facilitate commerce and distribution, establish new agro-processing plants and create new wholesale and retail businesses.

The debt raised to finance African agricultural projects can be serviced through the reduction in expenditures currently allocated to food imports. Since demand for food is perennial, strong business cases are possible if the structural impediments to production can be overcome.

Investment in agrifoodtech saw a 44 percent decline globally from 2021 to 2022. Not so in Africa, where it has grown substantially in recent years, from US$185 million in 2020 to US$482.3 million in 2021, and to US$640 million in 2022. However, this investment represents less than 1 percent of the total amount spent on imported food.

In addition to overcoming structural obstacles to production, planning needs to be pragmatic, focusing on large-scale agrifood projects, developing bankable business cases and managing investment risks to create an environment attractive to private sector investors. Governments have a crucial role to play in this by taking responsibility for the creation of a regulatory environment supportive of a substantially expanded agricultural sector in Africa. The shift toward large-scale agriculture, however, must not come at the expense of small-scale farmers, who are an integral part of Africa's agricultural landscape.

There has never been a more opportune moment for a fundamental shift in Africa's agricultural sector. Africa should be able to feed itself with its locally produced food; it should also be contributing significantly to feeding the world.

30 million tons

of cereals have been displaced in Africa due to the situation in Ukraine

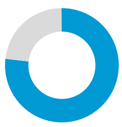
Oil platform at sunset, Namibia

Fueling economic diversification and growth: Angolan oil & gas takes center stage

As Angola seeks to diversify and grow its economy, its oil & gas sector emerges as the leading catalyst. **Mukund Dhar** and **Nicholas Macheras** discuss how the country's strategic focus on leveraging its hydrocarbon resources can become a pathway toward a more resilient and dynamic economy.

Angola's first oil wells were drilled more than a century ago, but the country's rich history in oil goes back far further. In the 1700s, Portuguese colonialists first discovered oil seeps and asphalt deposits just 60 kilometers north of Luanda. Today, Angola is consistently one of Africa's top-four oil-producing countries, alongside Libya, Nigeria and Algeria. Its first commercial onshore deposits were proven in 1955, followed in 1968 by its first offshore discovery, the Malongo. Eight years later, in 1976, following its independence from Portugal, Angola established Sonangol U.E.E. to manage the exploitation of the nation's hydrocarbon resources.

With the discoveries at Girassol in 1996 by Total Fina Elf (now part of TotalEnergies SE), deep-water reserves have been a major driver of Angola's increased prominence on the world stage, and of the oil industry's transformation of its national economy. Ultra-deep pre-salt reserves in blocks awarded in 2011, which reach depths of more than 5,000 meters below sea level, are today broaching new frontiers in deep-water discoveries. With crude oil production now on the rise again — increasing by more than 580,000 barrels month-on-month from December 2022 to January 2023 — Angola is now aiming to stabilize its output to approximately 1.3 million barrels per day in the next three years.



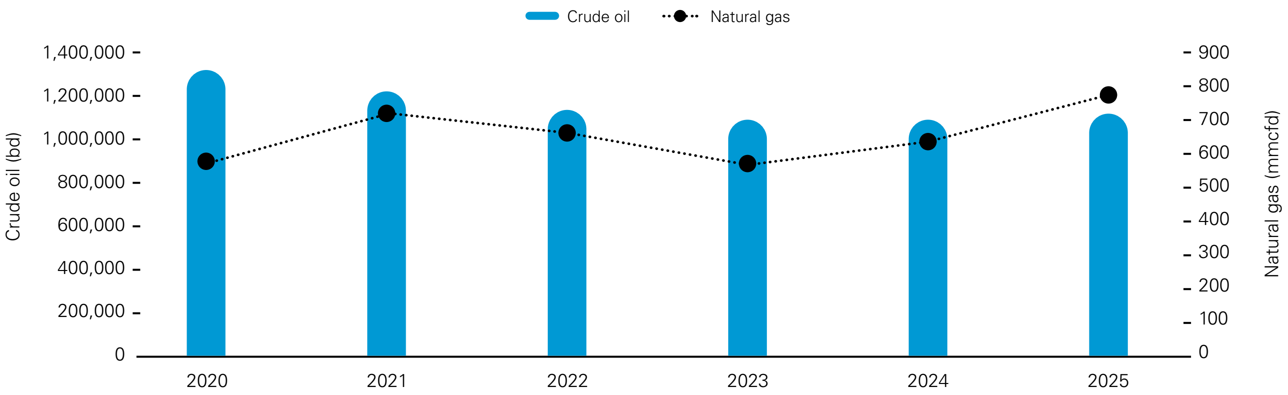
70%

of African M&A deals in 2022 were in the oil & gas sector

Angola's economy is heavily dependent on its oil & gas industry. Oil & gas products make up more than 90 percent of its exports. Crude oil exports alone accounted for US$39.94 billion in 2022, an uplift of 44 percent from 2021. And the lion's share of that oil comes from its offshore fields. These fields produce a much sought-after light, sweet crude oil with low sulphur, used typically for processing light, refined petroleum products.

Current trends in deep-water discoveries give investors good reason to be enthusiastic about Angola's prospects. Dealmaking in Angola's oil & gas sector is even shaping the face of African M&A. In 2022, according to

Angola crude oil and natural gas production (mmcfd) 2020 – 2025



Source: GlobalData, Oil & Gas Intelligence Center

a study by Rystad Energy, oil & gas M&A accounted for 70 percent (US$15 billion) of all M&A transactions on the continent.

As with any heavily petroleum-dependent economy, though, market volatility in the oil & gas sector plays a significant factor in shaping Angola's investment landscape. 2021 saw Angola emerge from half a decade of persistent recession. In the past two years, though, oil production has risen, and the price of oil has surged because of the conflict in Ukraine. This mix of high oil revenues coupled with the implementation of the National Development Plan (2018 – 2022) under the coordination of an International Monetary Fund (IMF) financial support program (December 2018 – 2021) has provided a much-needed boost to Angola's economic recovery, and to investments to stimulate other industrial sectors that will reduce the country's monolithic dependence on oil.

Offshore worker in the oil & gas industry in Angola

Legal and regulatory reform

Under the Constitution of Angola, all onshore and offshore petroleum reserves are the property of the State. The Angolan legal framework for oil and natural gas exploration and production is set out primarily in Law No. 10/04 of 12 November 2004, as amended in 2019 by Law No. 5/19 of 18 April 2019 (Petroleum Activities Law). The Petroleum Activities Law states that all petroleum operations can only be conducted under specific licenses issued by the Ministry of Mineral Resources, Oil and Gas (MIREMPET), or by an oil concession awarded by the Angolan government. This includes prospecting, exploration, development and production of crude oil and natural gas.

Following his election in 2017, Angola's President João Lourenço moved quickly to enact regulatory and structural reforms in the oil & gas sector. Besides the amendment to the Petroleum Activities Law, this included creating a new oil & gas regulator, namely the National Agency for Oil, Gas and Biofuels (ANPG), through Presidential Decree (No. 49/19 of 6 February 2019).

This decree establishes ANGP as the regulatory body in charge of regulating, supervising and promoting oil & gas operations. Regulatory reforms further included the enactment of decrees to simplify investment in the oil & gas industry, and the approval of new rules and procedures for oil & gas public tenders.

ANPG's creation ended state-owned Sonangol's multiple roles as regulator, concessionaire and operator in the country's oil sector. Changes were also made to Sonangol's board. A Sonangol executive, Sebastião Gaspar Martins, was appointed as its new chairman. Free of its regulatory function, the company's activities now focus on research, production, and related petrochemical activities, as well as exploring other sectors such as renewables and hydrogen.

55

oil & gas blocks were designated for auction by 2025

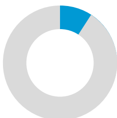
The long-term intent is to transform Sonangol into an energy company.

Further reforms include a decree under Angola's privatization regulations that provides for the privatization of Sonangol. As part of the country's four-year privatization program, Angola is planning to divest a 30 percent stake in Sonangol within the next five years.

Commentators have noted that the Angolan government's move to transfer the regulatory function from Sonangol to ANPG is proving successful. Quicker approvals of work plans have already resulted in new discoveries and the development of oil fields, including by TotalEnergies and ENI.

Sonangol's divestment of non-core companies and assets to focus on oil and to attract foreign investors will likely also increase investor and operator confidence, as will enhancements in governance and transparency generally in the Angolan oil & gas industry.

Other recent legislative and fiscal reforms are also paving the way for increased oil & gas production. In May 2018, the government reduced the headline tax rates for marginal fields. For fields with discoveries of fewer than 300 million barrels of oil, the petroleum production tax was reduced from 20 percent to 10 percent, while the petroleum income tax was also reduced from 50 percent to 25 percent. Paulino Jerónimo, the President of ANPG, stated that the new fiscal and contractual terms are "focused on incentivizing the exploration and the production of such reserves for both African and international medium-sized E&P companies." The State Budget Law for 2021 (Law No. 42/20 of 31 December 2020) further evolved the tax landscape by approving a reduction from 15 percent to 6.5 percent of the withholding tax rate applicable to services provided by non-resident entities to oil companies with permanent establishments or residency in Angola.



10%

The new rate of petroleum production tax for fields of fewer than 300 million barrels of oil

A new private investment law, Law No. 10/18 of 26 June 2018, also reduces the minimum capital requirement, facilitates the repatriation of capital and eliminates the requirement that local investors must have a 35 percent stake in foreign investment projects. This last point is a significant development, given the economic and legal challenges created by what was typically a carried interest.

Foreign investors to develop new upstream discoveries

Angolan hydrocarbons are found both onshore and offshore, the latter dominating. Fifty offshore "blocks" have been designated and identified simply by numbers. By contrast, onshore blocks are typically identified by one of five main oil basins (Congo, Lower Congo, Kwanza, Benguela, Namibe) accompanied by a number. Two further inland basins also exist: "Kassanje" and "Etosha/Okavango," neither currently produces any oil.

Angola's most significant current investment initiative is its 2019 – 2025 Bidding Strategy. The intent of this strategy is to auction off 55 oil & gas blocks by 2025. In 2019, Angola offered ten oil & gas blocks for public auction. Eni and TotalEnergies won operatorships. In 2020, three blocks in the Lower Congo Basin and six blocks in the Kwanza Basin were allocated for public tender. Operatorships were secured by MTI Energy, Somoil, Grupo Simples, Alfort Petroleum and Angola Integrated Services.

ANGOLA'S REVISED HYDROCARBON EXPLORATION STRATEGY 2019 – 2025

PRODUCTION

FS Association
Stakeholders: Sonangol E&P (80%); Somoil* (15%); Sonangol P&P (5%)

FST Association
Stakeholders: Sonangol E&P (63.67%); Somoil* (31.33%); Sonangol P&P (5%)

Cabinda South
Stakeholders: Pluspetrol Angola* (55%); Sonangol P&P (25%); Force Petroleum (20%)

Block 0
Stakeholders: Sonangol E&P (41%); Cabinda Gulf Oil Company (Chevron)* (39.2%); Total E&P Angola (10%); Eni Angola (9.8%)

Block 2/05
Stakeholders: Somoil* (30%); Falcon Oil (20%); Kotoil (12.5%); Poliedro Oil (12.5%); Prodoil (12.5%); Acrep (12.5%)

Block 3/05
Stakeholders: Sonangol P&P* (50%); Maurel & Prom Angola (20%); Eni Angola (12%); Somoil (10%); NIS-Naftagas (4%); INA (4%)

Block 4/05 (production area)
Stakeholders: Sonangol P&P* (50%); Somoil (18.75%); Acrep (18.75%); Prodoil (12.5%)

Block 14
Stakeholders: Cabinda Gulf Oil Company (Chevron)* (31%); Sonangol P&P (20%); Eni Angola (20%); Total E&P Angola (20%); Galp Energia Overseas (9%)

Block 15
Stakeholders: Esso Exploration Angola (ExxonMobil)* (36%); bp Exploration Angola (24%); Eni Angola (18%); Equinor Angola (12%); Sonangol P&P (10%)

Block 15/14 (Lira)
Stakeholders: ANPG (100%)

Block 16
Stakeholders: Total E&P Block 16 A/S* (65%); Sonangol P&P (20%); Total E&P Chissonga (15%)

Block 17
Stakeholders: Total E&P Angola* (33%); Esso Exploration Angola (19%); bp Exploration Angola Block 17 (15.84%); Equinor Angola (12.16%); Equinor Angola AS (10%); Total Exp M'Bride (5%); Sonangol P&P (5%)

Block 18
Stakeholders: bp Exploration Angola* (36.34%); SSI (37.72%); Sonangol P&P (16.28); bp Exploration Beta (9.66%)

Block 31 (production area)
Stakeholders: bp Exploration Angola* (26.67%); Sonangol P&P (45%); SSI 31 (15%); Equinor Angola (13.33%)

Block 32 (production area)
Stakeholders: Total E&P Angola (30%); Sonangol P&P (30%); SSI 32 (20%); Esso Exploration Angola (15%); Galp Energia Overseas (5%)

Block 14K & A-IMI
Stakeholders: Chevron (Congo)* (15.75%); Total E&P Congo (26.75%); Cabinda Gulf Oil Company (15.5%); Eni Angola Exploration (10%); Sonangol P&P (10%); Angola Block 14 B.V. (10%); Soc. Nat. Des Pét. Du Congo (SNPC) (7.5%); Galp E&P Petrolifera (4.5%)

EXPLORATION

Cabinda North
Stakeholders: Eni Angola* (61.54%); Sonangol P&P (25.64%); Acrep (12.82%)

Block 1/14
Stakeholders: Eni* (35%); Equinor (30%); Sonangol P&P (25%); Acrep (10%)

Block 2/15 (Garoupa Oeste)
Stakeholders: ANPG (100%)

Block 3/05-A
Stakeholders: Sonangol P&P* (25%); China Sonangol (25%); Maurel & Prom Angola (20%); Eni Angola (12%); Somoil (10%); NIS-Naftagas (4%); INA (4%)

Block 4/05 (exploration area)
Stakeholders: Sonangol P&P* (50%); Somoil (18.75%); Acrep (18.75%); Prodoil (12.5%)

Block 5/06
Stakeholder: Sonangol P&P (100%)

Block 6/15 (Cegonha)
Stakeholders: ANPG (100%)

Block 15/06
Stakeholders: Eni Angola* (36.84%); Sonangol P&P (36.84%); SSI (26.32%)

Block 17/06
Stakeholders: Total E&P Angola* (30%); SSI (27.5%); Sonangol P&P (20%); Somoil (10%); Falcon Oil (5%); Acrep Block 17/06 (5%); PTT E&P (2.5%)

Block 21/09
Stakeholders: Total E&P Angola Block 20-21* (80%); Sonangol P&P (20%)

Block 23
Stakeholders: Sonangol P&P (100%)

Block 31 (exploration area)
Stakeholders: bp Exploration Angola* (26.67%); Sonangol P&P (45%); SSI 31 (15%); Equinor Angola (13.33%)

Central Cabinda
Stakeholders: Eni Angola* (42.5%); ExxonMobil (32.5%); Sonangol P&P (25%)

Block 30
Stakeholders: Esso E&P Angola Block 30* (60%); Sonangol P&P (40%)

Block 34
Stakeholders: ANPG (100%)

Block 44
Stakeholders: Esso E&P Angola Block 44* (60%); Sonangol P&P (40%)

Block 45
Stakeholders: ExxonMobil E&P Angola Block 45* (60%); Sonangol P&P (40%)

Block 48
Stakeholders: Total E&P Angola* (40%); Sonangol P&P (30%); Qatar Petroleum International Upstream (30%)

IN ABANDONMENT PROCESS

Block 19/11
Stakeholders: bp Exploration Angola* (50%); Sonangol P&P (40%); China Sonangol (10%)

Block 22/11
Stakeholders: Repsol Angola 22* (30%); Sonangol P&P (50%); Equinor (20%)

Block 24/11
Stakeholders: bp Exploration Angola* (50%); Sonangol P&P (50%)

Block 25/11
Stakeholders: Total E&P Angola* (35%); Sonangol P&P (30%); Equinor Angola (20%); bp Exploration Angola (15%)

Block 36/11
Stakeholders: ConocoPhillips* (50%); Sonangol P&P (50%)

Block 37/11
Stakeholders: ConocoPhillips* (30%); Sonangol P&P (50%); Repsol (20%)

Block 40/11
Stakeholders: Total E&P Angola* (40%); Sonangol P&P (30%); Equinor Angola (20%); Petronas (10%)

UNDER NEGOTIATION

Block KON-2
Stakeholders: ANPG (100%)

Block 3/15 (Alce Gunga)
Stakeholders: ANPG (100%)

Block CON-4
Stakeholders: ANPG (100%)

Block KON-4
Stakeholders: ANPG (100%)

Block KON-11
Stakeholders: ANPG (100%)

Block KON-12
Stakeholders: ANPG (100%)

Block KON-16
Stakeholders: ANPG (100%)

Block 18/15
Stakeholders: ANPG (100%)

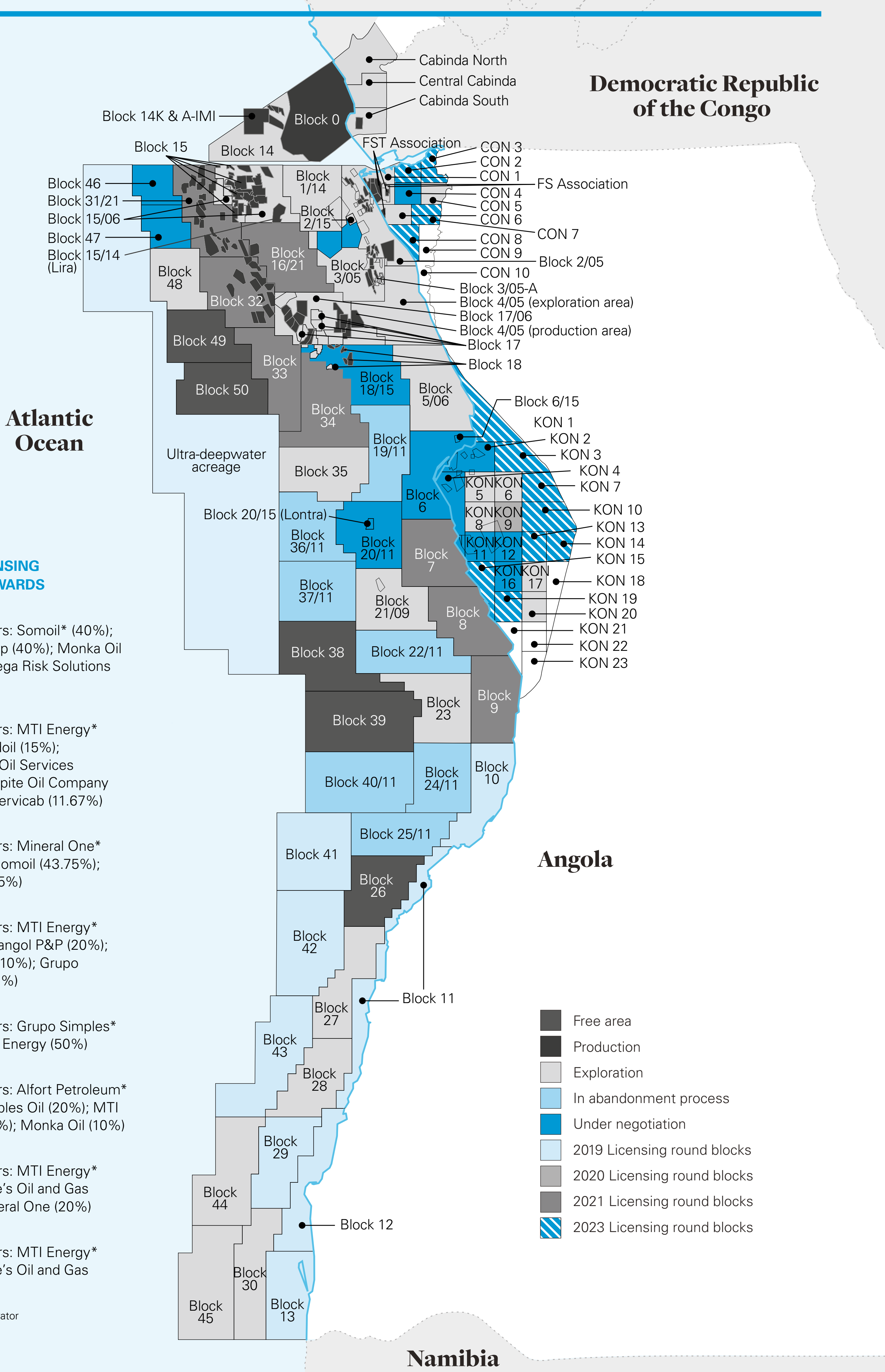
Block 20/11
Stakeholders: Total E&P Angola* (50%); Sonangol P&P (20%); bp Exploration (30%)

Block 20/15 (Lontra)
Stakeholders: ANPG (100%)

Block 46
Stakeholders: ANPG (100%)

Block 47
Stakeholders: ANPG (100%)

Source: ANPG; The Energy Year, 2023



2020 LICENSING ROUND AWARDS

CON-1
Stakeholders: Somoil* (40%); Intank Group (40%); Monka Oil (10%); Omega Risk Solutions (10%)

CON-5
Stakeholders: MTI Energy* (50%); Prodoil (15%); Prodiaman Oil Services (11.67%); Upite Oil Company (11.67%); Servicab (11.67%)

CON-6
Stakeholders: Mineral One* (43.75%); Somoil (43.75%); Prodoil (12.5%)

KON-5
Stakeholders: MTI Energy* (60%); Sonangol P&P (20%); Monka Oil (10%); Grupo Simples (10%)

KON-6
Stakeholders: Grupo Simples* (50%); MTI Energy (50%)

KON-8
Stakeholders: Alfort Petroleum* (50%); Simples Oil (20%); MTI Energy (20%); Monka Oil (10%)

KON-17
Stakeholders: MTI Energy* (60%); Brite's Oil and Gas (20%); Mineral One (20%)

KON-20
Stakeholders: MTI Energy* (50%); Brite's Oil and Gas (50%)

*Indicates operator

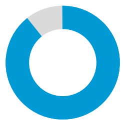
The 2021/2022 bid round was launched in February 2022, involving eight blocks in the Lower Congo and Kwanza Basins. Proposals for this round are still being evaluated. The 2023 auction includes four blocks in the Congo Basin and eight in the Kwanza Basin. The final auction, to take place in 2025, will allocate ten pre-salt blocks in the deep-water Kwanza Basin.

Angola's upstream oil & gas market shows promise, too, and is likely to attract increased investment in coming years. Signs of this are already evident. In July 2022, ANPG and TotalEnergies, along with the other Block 17 partners, announced an US$850 million final investment decision with respect to the CLOV Phase 3 development for offshore Block 17. Production for this development is expected to start in late 2024 and will involve extending the submarine infrastructure and five new wells at water depths ranging from 1,100 meters to 1,400 meters. Once completed, it is anticipated that this extension of the subsea production network and its interconnection to the CLOV FPSO will reach a peak of 30,000 barrels per day.

As recently as November 2022, ExxonMobil (as operator), ANPG and the other Block 15 partners announced a new oil discovery at the Bavuca South-1 exploration well (which is 1,100 meters deep). This was Block 15's first discovery in nearly 20 years.

In addition to oil prospects and development, Angola's New Gas Consortium (NGC) has also made strides, reaching a final investment decision for the Quiluma and Maboqueiro gas project. This is Angola's first non-associated gas project, and NGC expects its first gas production for 2026. Production is expected to plateau at 330 million cubic feet per day. NGC includes Eni, Chevron, BP, TotalEnergies and Sonangol, together with ANPG.

While distribution has not yet attracted the same level of attention, expected increases in oil refinement also create opportunities for oil majors and strategic investors to improve and expand the existing infrastructure.



85%

of the total demand for refined petroleum products needed to be met through imports

Midstream and downstream developments and opportunities

Since 2001, Angola's downstream industry has been served by the Luanda refinery. This refinery can meet only 20 percent of the country's total demand, processing up to 65,000 barrels per day. Angola must consequently import most of its refined oil products. A US$235 million project currently underway to expand the Luanda refinery's capacity to 72,000 barrels per day is just one project aimed at reducing dependence on imports and enhancing fuel security.

The Angolan government plans several new greenfield oil refineries, the first of which will be the Cabinda refinery. Sonangol was awarded a contract for the construction of this new refinery in May 2019, and Phase 1 of the work was completed in 2022, with added capacity of 30,000 barrels per day. Phase 2, scheduled for completion in 2024, will add capacity of a further 60,000 barrels per day for the production of gas oil, gasoline, fuel oil and Jet A1.

The Cabinda refinery will be followed by the Soyo and Lobito refineries. A call for tenders was published in 2019 for a public-private partnership (PPP) to build the Soyo oil refinery in the Zaire Province. This refinery is scheduled for completion by 2025 and it will add capacity of a further 100,000 barrels per day.

> **Angola continues to develop its dispute resolution legal landscape, although it is yet to be fully tested by the oil & gas industry**

The Lobito refinery, with an initial investment of US$10 billion, is expected to process roughly 200,000 barrels of crude oil per day. It is also scheduled for completion in 2025. Construction of this project was suspended in 2016, given the fall in oil prices. Since then, Sonangol has made significant efforts to accelerate the formation of the consortium and finalize its shareholder structure.

Investment protection and dispute resolution

Foreign investors are almost always concerned about the ability to enforce their rights and resolve disputes that can arise throughout the life cycle of their investments. These include issues relating to investment structuring and inception; conduct and management of daily business; and the ability to exit investments and repatriate capital and profits. In such circumstances, foreign investors may prefer to avoid local courts. Investors tend to prefer disputes to be resolved in jurisdictions perceived to be more neutral and/or that have a wider body of judicial precedents dealing with similar or tangential issues. In this regard also, positive developments have emerged in Angola.

Angola has traditionally adopted a mixed approach to investor protection and dispute resolution. In September 2021, the country deposited its Instrument of Ratification of the Settlement of Investment Disputes between States and Nationals of Other States (ICSID Convention) with the World Bank. This allows foreign investors to bring claims against the state in case of certain measures affecting member-state investors' rights. Through ratification of the ICSID Convention, Angola hence accepts that, in certain situations, foreign investors may have a right to bring an international investment arbitration against the state and have the ability to access neutral, independent, enforceable investor-state arbitration.

ICSID arbitration is held under the auspices of the World Bank. It is a self-contained dispute resolution system, in which proceedings are "delocalized from domestic procedures and local courts do not intervene in the ICSID process." If the tribunal finds the state to have violated its treaty obligations, it issues an award in favor of the investor. The most frequent remedy for aggrieved investors is monetary damages, seeking to put the investor in the position it would have been if not for the state's violation(s).

Angola has also entered into bilateral investment treaties (BITs) with several countries. Four of these BITs — with Portugal, Cape Verde, Italy, Germany and Russia — allow investors to have recourse directly against the state. Its treaty with Brazil, however, does not.

In other earlier developments, Angola enacted its Arbitration Act (Law No. 16/03 of 25 July 2003). This Act is partially aligned with the United Nations Commission on International Trade Law (UNCITRAL), which expressly allows the state and state entities to agree to arbitration. Although discussions are apparently ongoing about perhaps aligning the Arbitration Act more closely with UNCITRAL, the United Nations website shows that Angola has yet to formally ratify, accede to or enact this model law. Specific areas reportedly under discussion include several relevant to oil & gas disputes, including: the participation of state entities in arbitration (which is already authorized by law); the use of provisional measures and improved court support; and the arbitration of labor and corporate disputes.

Furthermore, in 2017, the New York Convention of 1958 came into force in Angola. This makes awards in Angola-seated arbitrations enforceable globally. Sonangol, in particular, has regularly entered into contracts providing for arbitration and has publicly engaged in arbitration proceedings.

Since then, the Angolan government has also adopted arbitration in a number of other laws that are important to international investors in the oil & gas market (and other sectors of the economy). These include amendments to the Securities Code in Law No. 9/20 of 16 April 2020, the new Law on Public-Private Partnerships, Law No. 11/19 of 14 January 2011, and the previously mentioned new Private Investment Law. These

Offshore worker in the oil & gas industry in Angola

constitute a clear assurance to global investors that Angola accepts arbitration as a key dispute resolution mechanism

Angola continues to develop its dispute resolution legal landscape, although it is yet to be fully tested by the oil & gas industry. Whether investors will be comfortable arbitrating in Angola will depend on their familiarity with the country's practices, government investments and a sophisticated local legal community to ensure the courts support arbitration and help protect and enforce awards.

The combination of recent progress in reforming the country's regulatory, fiscal and legislative environment with the sheer size of oil discoveries represents good reason for cautious confidence in Angola's recovery and justifies the increasing interest of domestic and foreign investors.

As the next decade unfolds, it is expected that Angola will continue its trajectory of regulatory and economic reforms. These initiatives will not only be crucial for the diversification into other sectors, but also for reducing dependence on revenues from hydrocarbons, potentially ushering in a new phase of transformation through the Angolan economy.

300,000

barrels per day

The projected production of the planned Soyo and Lobito refineries, combined

Jungle river in the rainforest of the Congo Basin,Odzala-Kokoua National Park, Republic of Congo

Preserving Africa's biodiversity: Why global funding is vital

Countries that need biodiversity protection the most tend to be the ones least able to finance the means to effect change. Africa, a complex and abundant continent, exemplifies this reality: Despite its natural wealth, there is little economic prosperity, writes **Tallat Hussain**.

Africa's ecosystems, which are essential to sustaining its biodiversity, are under threat. The continent is home to many of the world's most biodiverse regions, including eight of the 36 recognized global biodiversity hotspots—areas with at least 1,500 vascular plants that are endemic and found nowhere else on Earth, and which have lost at least 70 percent of their primary vegetation. The East African coastal forests, ranked among the top-ten most threatened biodiversity hotspots in the world, are particularly vulnerable.

The effects of climate change are already apparent on the continent and are expected to worsen significantly in the coming decades. The rainforests of the Congo recently overtook the Amazon as the world's most significant carbon sink. This removal of carbon from the atmosphere is valued at US$55 billion per year. However, deforestation is progressing at a prodigious rate from the Congo Basin, across West Africa, diminishing the continent's ability to provide such essential ecosystem services.

Although nature-related risks and the need to protect biodiverse ecosystems are continent-wide, the priorities and solutions to fund biodiversity protection solutions differ from country to country. Following the 2022 Conference of the Parties to the UN Convention on Biological Diversity (COP 15), the participating nations agreed upon the Global Biodiversity Framework. Its main goal—known as "30 by 30"—is to "ensure and enable that by 2030, at least 30 percent of terrestrial, inland water, and coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed."

African governments have been taking steps to conserve biodiversity in recent decades, aiming to slow the rate of ecosystem deterioration and species loss. However, these efforts have fallen short of the 30 by 30 goal agreed upon in the Global Biodiversity Framework. Several factors, including country-specific development priorities and global conflicts, along with the high cost of borrowing and various in-country physical and social risks, are causing major constraints for access to funding.

The scale of the challenge

According to the Organization for Economic Cooperation and Development (OECD), the decline of biodiversity is generating "significant but largely overlooked risks to the economy, the financial sector and the well-being of current and future generations." Mobilizing private finance for biodiversity and natural resources management is not a new concept, but the urgency of conservation needs and the broad scope of related issues have refocused funding efforts on two critical areas: understanding the biodiversity impacts of finance and vice versa, and the need for multiple stakeholders to participate at various levels in order to achieve a shared objective.

8 of 36

Africa is home to eight of the 36 recognized global biodiversity hotspots

Numerous statistics and predictions abound on the scale and cost of addressing and implementing solutions for biodiversity protection. According to the Global Environment Fund, "preserving healthy terrestrial and marine ecosystems, and the clean air, fresh water and biodiversity on which we all depend, has a financial cost of US$300 billion to US$400 billion every year." To effectively manage Africa's 1,812 national parks, covering 3.1 million square kilometers, an estimated annual funding of approximately US$10.2 billion is required, along with an extra US$1 to US$2 billion annually for protected areas that are home to lions. Currently, only 19 percent of Africa's land and 17 percent of the seas around the continent are protected in one form or another. An estimated annual funding of approximately US$20 billion to US$25 billion is needed to align with the 30 by 30 objective.

> "The effects of climate change are already apparent on the continent and are expected to worsen significantly in the coming decades

Africa's biodiversity loss risk

SOURCES OF FUNDING

TYPES OF SOURCES

Public sources
- Government budgets (taxes, fees and charges)

Private sources
- Household revenues and savings
- Corporate revenues and savings

INTERMEDIARIES

Public intermediaries
- Government ministries
- Development finance institutions (national, bilateral, multilateral)
- Global Environment Facility and other multilateral funds

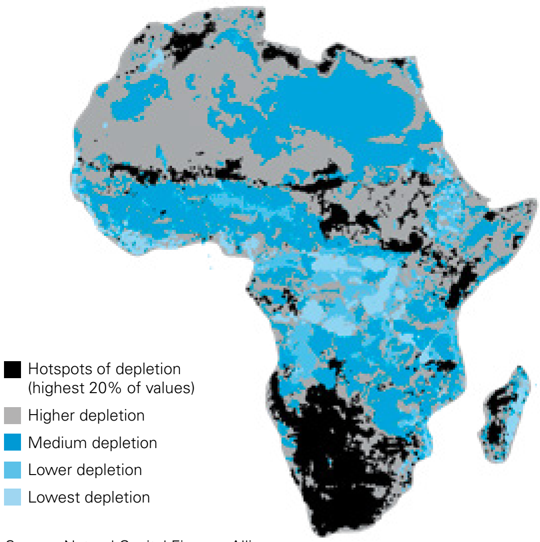
Private intermediaries
- Institutional investors
- Asset managers
- Commercial banks
- Philanthropic organizations

FINANCE INSTRUMENTS AND MECHANISMS
- Grants, subsidies and transfers
- Concessional debt
- Commercial debt
- Blended finance
- Equity and own funds
- Conditionalities applied to other financing
- Impact investing
- Payments for ecosystem services
- Water quality trading and offsets
- Forest and land use carbon offsets

FACTORS INFLUENCING BIODIVERSITY NEEDS

CLIMATE-RELATED DRIVERS
- Diminished agricultural potential
- Migration
- Deforestation, loss of carbon sinks
- Water shortages

Africa's biodiversity loss risk



Source: Natural Capital Finance Alliances

GEO-ECONOMIC AND SOCIO-POLITICAL DRIVERS
- Conflict
- Need for GDP growth
- Population growth
- Poaching and theft

FUNDING NEEDS

Institution building
- Public
- National and local government
- Conservation agencies
- Conservation nongovernmental organizations
- Law enforcement
- Legislative development

Protected areas
- Establishment
- Infrastructure development
- Ecological and social studies
- Community stakeholder engagement
- Management
- Ranger training

Biodiversity preservation outside of protected areas
- Community stakeholder engagement
- Ecological and social studies

Public awareness
- Households/ General public
- Educational institutions

Other biodiversity related needs
- Social/Commercial value of biodiversity
- Pharmaceutical and other IP
- Biodiversity impact mitigation in development projects
- Other economic, social and environmental needs related to biodiversity

Infant mountain gorilla
(Gorilla beringei beringei)
Virunga National Park, Congo

Mechanisms for change

Causal links between biodiversity preservation in Africa and environmental, social and governance (ESG) risk mitigation in developed markets need to be clear and visible in order for impactful funding to become a reality. If these links can be compellingly demonstrated, a range of options exist for developed and African nations to collaborate in protecting African biodiversity initiatives. These include funding sourced from public and private sectors, and a range of intermediaries. Public intermediaries include government ministries, development finance institutions (DFIs), whether national, bilateral or multilateral, and multilateral and other funds whose mandates include preservation of biodiversity, such as the Global Environment Facility (GEF).

Private sector intermediaries—institutional investors, asset managers, commercial banks, philanthropic organizations and direct private sector investors into biodiversity protection projects—are also part of the equation. Looking at the scale of resources for funding real and measurable results casts a positive light on the opportunities that biodiversity protection presents. For instance, in areas such as mining, infrastructure development and agriculture in terms of minimizing harm is included among the measures to manage a project's overall environmental impact.

The Global Biodiversity Framework

The Global Biodiversity Framework agreed upon at COP 15 requires countries to submit revised or updated National Biodiversity Strategies and Action Plans (NBSAPs) in order for countries to assess biodiversity-related risks and explore mechanisms to effectively address them.

Preserving biodiversity cannot be viewed in isolation; it is inextricably linked to the geo-economic and socio-political factors that influence it, as well as the supply chains to which it contributes. These factors also require funding and frequently are at cross-purposes to biodiversity needs. Some of the elements to fortify biodiversity conservation and protection of ecosystem services in places such as the African continent include building new or strengthening existing regulatory and administrative infrastructure to implement and enforce local laws, international commitments and country-specific plans such as NBSAPs. Having robust systems in place relies on also having mechanisms in place for managing and auditing the use of funds and assessing them against the intended outcomes, thereby ensuring the integrity of financing solutions. Any risks to the integrity of a solution create risks to financing the solution.

Conservation and economics

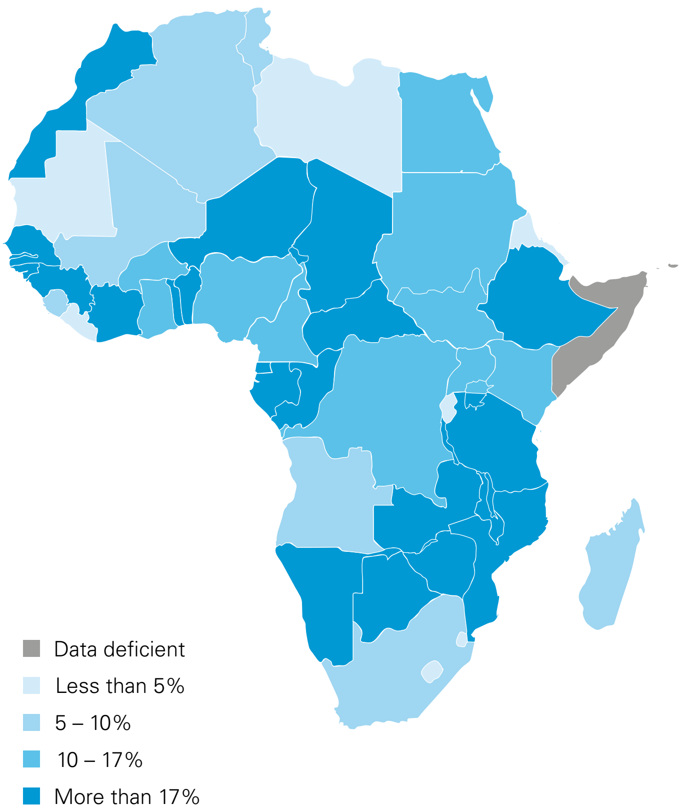
The cost of biodiversity loss goes deeper than the cost of financing solutions. Biodiversity loss has the potential to impact a country's economics at many levels, including trade, security of supply, energy transition and even human health and safety. Some experts have argued that "partial ecosystem collapse" in

US$ 78 – 91 billion pa

Estimated global spending on biodiversity

Source: OECD

Percentage of African protected terrestrial areas by country 2020



Source: Africa Geographic

areas such as fisheries, tropical timber production and wild pollination could potentially lead to credit downgrades for certain countries. These downgrades could significantly decrease the availability of funding or increase the annual interest payment on debt, leaving many developing nations at significant risk of sovereign debt default and/or fiscal shortages. There is a compelling economic rationale for sovereigns to take action to prevent, mitigate or reverse adverse biodiversity impacts. By eliminating or reducing nature-related risks, they can ultimately improve their creditworthiness.

Various instruments and mechanisms are available for funding biodiversity protection, and numerous innovative new solutions are currently emerging. One such example is the recently announced collaboration between APG Asset Management, Achmea and African Development Bank, supporting the bank's sustainable development loans by providing capital through the US$1 billion ILX Emerging Market Private Credit Strategy Fund I. The cooperative agreement between the parties shows how grant funding—from government institutions in the UK, Netherlands and Germany—can be effective in mobilizing large-scale capital from pension funds to multilateral development banks and other DFIs to support projects for sustainable development goals (SDG) in emerging markets. In this case, the funding enables the African Development Bank to consolidate financial resources from institutional investors in order to close the financing gap required to meet the bank's environmental ambitions for providing loans to the private sector in 54 African states.

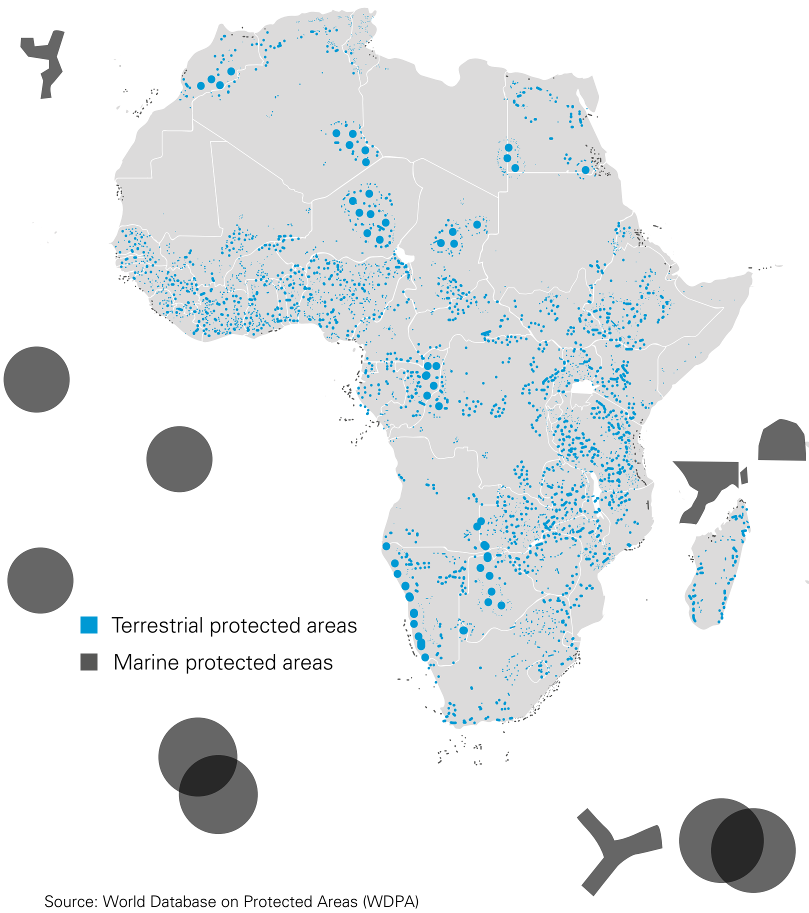
Sovereign issuances to address natural capital are also developing in emerging markets, including market mechanisms such as SDG-linked or sustainability-linked bonds (SLB), as well as green bonds and green loans. Arguably, the flexibility of instruments such as SLBs that link to forward-looking targets, makes these instruments more attractive to emerging market issuers. Sovereign finance has its own challenges, but the highest hurdle is the acknowledgment of the role of the state in prioritizing and promoting solutions for biodiversity protection as part of its national and international commitments.

Nature-related financing examples include Belize's US$364 million blue bond refinancing in 2021, which is covered by a first-of-its-kind sovereign debt insurance "catastrophe wrapper" to cover Belize's loan repayments after hurricane events. Another example is the Uruguay SLB issued in 2022, linking forest preservation and greenhouse gas (GHG) emissions intensity reductions. This is indicative of the growing interest in innovative nature-related financing strategies in emerging economies and demonstrates that scaling up investment requires mechanisms that make participation appealing to investors. The protections needed are not limited to financial protections but also to managing reputational risk, which impacts participation from government entities and investors, and also on the integrity of the project.

According to GEF, blended finance is constantly evolving to produce innovative approaches for nature-based solutions, climate finance and other public/private financial solutions. A variety of grants have recently been developing, including performance-based, contingent and convertible grants and liquidity facilities. Recent successful examples show how political risk guarantees and insurance can also enhance private sector investments in the majority of vulnerable countries by mitigating political instabilities.

Solutions can also be blended, combining impact investing, for instance, through impact-specific

Major African protected terrestrial and marine areas 2022



Source: World Database on Protected Areas (WDPA)

bonds such as rhino bonds and forest resilience bonds, and projects with grants and institutional investment. Market mechanisms, such as carbon trading, can be incorporated into financing and offtake arrangements. Risk mitigation strategies, such as insurance and public guarantees, have a role to play.

Payments for ecosystem services

Payments for ecosystem services (PES) are another innovative approach to nature conservation that involve compensating the owners or custodians of land for providing environmental services such as watershed protection, forest conservation, carbon sequestration and landscape beauty. This arrangement benefits both the beneficiaries of these services and the landowners through subsidies or market payments. The rationale is that making payments for the benefits provided by natural ecosystems recognizes their contribution and ensures that the benefits continue, no matter their size. PES could be an additional tool to protect ecosystems in Africa by financing green growth projects.

The African Development Bank recognized the opportunity for applying PES for natural resources management in Africa almost a decade ago. Early examples included using PES for carbon sequestration projects under the Forest Investment Program and the Congo Basin Forest Fund. Three East African case studies in Uganda, Kenya and Tanzania show how PES were used to mitigate risks linked to conflict over natural resources and the impacts of

US$ 10.2 billion pa

Estimated funding needed for Africa's existing 1,812 national parks

Source: Bernstein et al., 2022

"asymmetric contracts resulting in unfair arrangements, elite capture, mismanagement and perverse incentives."

The beneficiary-pays approach is also used in PES programs for marine and coastal ecosystem conservation. In this approach, those who benefit from the improved provision of ecosystem services compensate resource owners or managers for changing their management practices to incentivize the provision of higher or additional ecosystem services. In Tanzania, revenues for the Marine Legacy Fund come from commercial fishing licenses, marine ecotourism revenue sharing and oil & gas taxation, and are used to pay coastal communities for conservation and to finance operational expenses.

Meeting the challenge

There are significant financial barriers to effectively implementing biodiversity conservation strategies in African countries. The effectiveness of biodiversity protection and conservation is impeded by various criticisms, such as insufficient financial resources for implementing planned activities and programs, lack of human resources and capacity in biodiversity conservation, absence of central clearing mechanisms to facilitate biodiversity financing, inadequate enforcement and compliance of environmental laws, data gaps related to the in-country economic value of biodiversity, and absence of regulatory infrastructure and technical capacity at the government level for implementing NBSAPs.

No matter what the scale of the issue or the solutions, driving change for biodiversity protection requires a concerted and inclusive approach that accommodates the needs of all stakeholders. Private sector participation is integral to achieving the Global Biodiversity Framework 2030 funding commitments, so biodiversity needs to be relevant to private sector investors and, at the same time, must be de-risked and provide acceptable returns on investment. The link between biodiversity loss, climate change impacts and economic development offers tremendous opportunities for innovative financing solutions despite the complex nature of biodiversity conservation in African nations.

Finance solutions and biodiversity protection in Africa

Africa has benefited from the development of the Biodiversity Finance Initiative (BIOFIN) in 2012 at the Convention on Biological Diversity (CBD) COP 11 to address biodiversity conservation finance solutions. It is a joint program of the United Nations Development Programme (UNDP) and the European Commission, designed as a "response to the urgent global need to divert more finance from all possible sources towards global and national biodiversity goals." Not all African states are involved fully with BIOFIN, but there is increased uptake and even indirect capacity-building.

Egypt Conducting an economic valuation of the country's biodiversity and ecosystems services according to international standards in order to promote sustainable consumption and the responsible use of natural resources.

Tanzania Controlling and promoting efficient sustainable technologies for charcoal production, thereby reducing the effect of energy consumption on the environment and improving livelihoods. Tanzania is strengthening the implementation of programs for protection and restoration of coral reefs and mangroves, thereby strengthening its climate resilience and safeguarding key ecosystem services, as well as promoting food security.

Mozambique Biodiversity offsets are currently the prioritized finance solution for Mozambique, partnering with Wildlife Conservation Society (WCS)/ COMBO and BIOFUND to develop a functional mechanism for biodiversity offsets in Mozambique, along with the development of relevant specific regulation, in partnership with the National Directorate of Environment.

Malawi Developing and implementing community-based programs on conservation and sustainable use of forest biodiversity, thereby empowering communities to maintain their environments and livelihoods.

Zambia Imposing a moratorium on fishing of threatened species to allow for natural restocking of the threatened species, thereby ensuring that species' diversity is maintained, food security is preserved and associated livelihoods are not lost.

Botswana Working with the government to revise park fees. The revised fees are expected to be implemented for all national parks, game reserves and all wildlife management areas in Botswana except the Kalahari Transfrontier Park. Botswana is taking steps to promote equitable information sharing by preparing ecoregion-based lists of threatened species and maps of their habitats. Additionally, the country is initiating systematic monitoring and reporting of these species to the Clearing House Mechanism.

South Africa Addressing priority gaps in foundational data for indigenous species and relevant invasive alien species, including documenting the distribution and abundance of priority groups and mobilizing data from specimens in collections.

Madagascar Given its unique biodiversity, Madagascar has been identified as one of the most mega-diverse countries in the world among a total of 17 mega-diverse countries. In order to build resilience, Madagascar is developing and implementing a national restoration plan for priority ecosystems vulnerable to the effects of climate change and desertification, including refuge areas.

Congo Educating women and young people about sustainable production and consumption of endangered species in order to promote awareness of biodiversity values, equitable access to information and species protection.

Seychelles Various finance solutions can be implemented, such as providing incentives (e.g., business tax concessions and increasing awareness of corporate social responsibility) to tourism operators investing in biodiversity conservation, promoting bio-security by enforcing and aligning fines and penalties with other environmental legislation to change behaviors, and institutionalizing the coordination of all biodiversity-related projects and their mainstreaming into economic and annual budgetary planning processes through the establishment of a biodiversity finance unit (BFU).

Cameroon Developing and implementing sector-specific biodiversity targets with action plans by key production ministries in order to protect ecosystem services, advance sustainable growth and align policy implementation.

Burundi Integrating areas under agriculture, aquaculture and silviculture into national, provincial and communal land-use plans, thereby mainstreaming sustainable food production and consumption into development planning.

Zimbabwe Incorporating gender considerations in all laws, policies, strategies, bylaws and mechanisms that govern the management, access and control of biodiversity resources.

Eritrea Promoting initiatives to reduce vulnerability of the population and of ecosystems to the effects of climate change and strengthening national capacities to respond to climate change and desertification. Eritrea is establishing in-situ conservation of wild pasture species, an arboretum and botanical gardens, thereby improving species protection and maintaining genetic diversity.

Sudan Working to reduce to environmentally acceptable levels the adverse impacts of traditional as well as organized gold mining on wildlife and inland waters and marine habitats, thereby maintaining key ecosystems and biodiversity. Sudan is adopting climate-smart farming systems such as agroforestry and agro-silvo pastoral systems that lead to natural regeneration of native species and rehabilitation of degraded areas, particularly in vulnerable areas such as traditional dryland farming.

Nigeria Plans to promote measures to reduce the volume of agricultural waste, fertilizers and agro-chemicals entering rivers and wetlands, thereby improving food security and reducing water and land pollution.

Namibia Developing mechanisms for reporting wildlife crime, creating rewards for information and reviewing mechanisms for prosecutions and appropriate penalties, in order to restore threatened species and maintain biodiversity and incomes.

Mali Developing public-private partnerships to maintain the efficacy of protected areas, as well as facilitating bilateral and multilateral cooperation for the conservation of protected areas.

Benin Developing a coherent conservation system of terrestrial (including mountains, hills and inselbergs) and marine ecosystems built on an ecologically representative and well-connected network of protected areas.

View of Cairo and the Nile from above, Egypt

Redefining US-Africa trade relations

Strengthening trade and investment ties with Africa is back on the agenda in Washington, DC, but skeptics argue that they have seen it all before: a US administration expressing interest in Africa, only to be followed by several successive administrations who completely overlook the region. The question that **Gregory Spak** and **Ian Saccomanno** ask is whether it will be different this time, and if actions and policy will follow the words.

Recent visits by senior leaders, the US-Africa Summit and the United States Trade Representative (USTR) negotiations with Kenya all point to an effort by the US to reinvigorate its economic outreach. Critics claim that the effort is either too little, too late or a thinly veiled attempt to blunt the influence of China and Russia, and skeptics remain unconvinced, having seen previous US administrations express interest in Africa before. Whether past will turn out to be prologue remains to be seen.

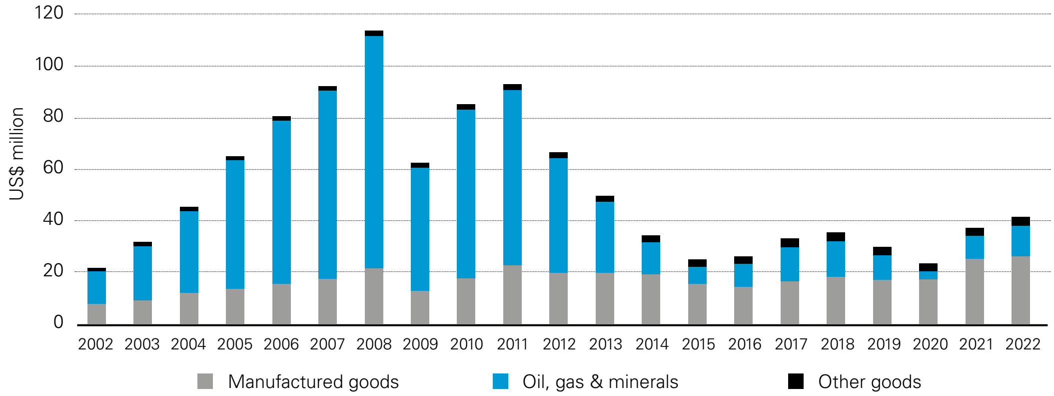
However, the current attempts occur under very different conditions in the context of an African Continental Free Trade Agreement (AfCFTA), the major developing economies of India and China beginning to outpace the US in trade with the continent, and a system of international trade governance that could be losing steam.

Evolution of the economic relationship between the US and Africa

Historically, the US has viewed its economic engagement with Africa primarily in the context of development aid and the extraction of natural resources. But recent US administrations claim to be changing the focus. Commerce Secretary Gina Raimondo, speaking at the recent US-Africa Summit, explained that the US wants to move from aid to an increased focus on investment and growth led by the private sector.

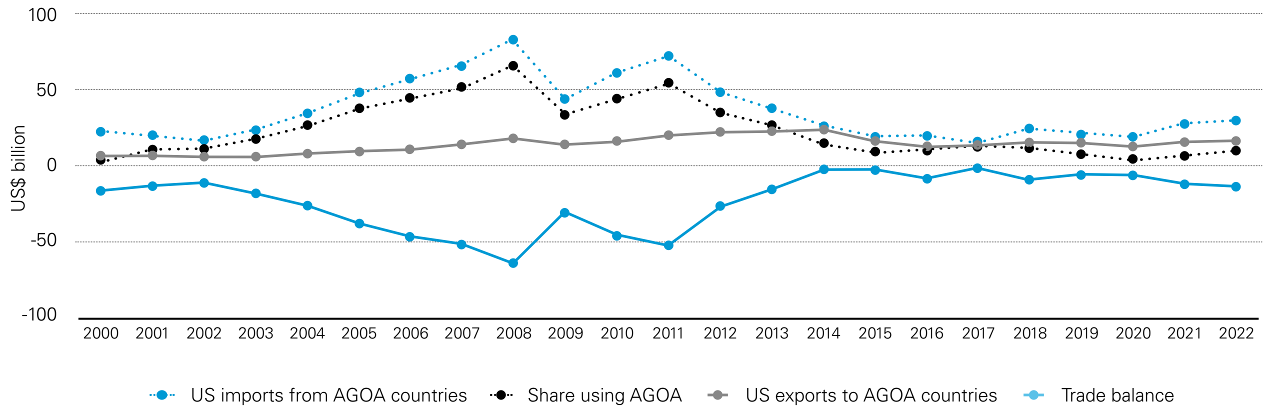
US trade with Africa has been flat for most of the past decade, following a temporary but large increase in trade that was almost entirely driven by oil. That may make these goals of deeper engagement look distant. At the same time, however, trade of manufactured goods has been steady and is now beginning to rise. US imports of textiles products, jewelry and some other manufactured goods are increasing, as are refined non-ferrous metals. In 2022, 28 percent of US imports were oil, gas and minerals, while manufactured goods had risen to 63 percent and showed some diversification. The US imported products under 6,139 unique (harmonized system) HS-10 codes in 2022, compared to approximately 4,900 a decade ago. Services trade is growing, too, with travel and education being one of the largest US import categories.

US goods imports from Africa



Source: US Census Bureau

Trade in goods between the US and AGOA beneficiaries



Source: US Census Bureau

On the investment side, foreign direct investment (FDI) between the US and Africa has remained flat and shows little sign of dynamism. In 2021, the US direct investment position in Africa totaled US$44.8 billion, a small decrease from where it was a decade earlier. Although total US FDI has stagnated, employment in the companies engaged in FDI has risen. US-owned companies in Africa employed 292,600 people in 2020, compared to 216,700 in 2012. African FDI in the US, on the other hand, has been rising, reaching US$10.3 billion in 2021. US employment in these firms has recently doubled, rising from 4,500 in 2012 to 9,800 in 2020.

Investment and trade between the US and Africa is modest and has not shown the levels of dynamism of trade with other regions. There is room for improvement. Bringing the economies closer together through improved infrastructure, better regulatory procedures and improving access to intermediate inputs and business services can help countries diversify their economies and expand trade linkages. The AfCFTA, the African Growth and Opportunity Act (AGOA), new trade agreements and other efforts to connect economies and reform trade rules can help support this important work. In addition to the AGOA, the US has only one other free trade agreement with an African nation—Morocco—which came into effect in 2006.

The AGOA and preferential market access

The African Growth and Opportunity Act (AGOA) was established in 2000 as a US legislative initiative to go beyond the Generalized System of Preferences (GSP) and create a unique preferential program for most African nations.

The AGOA program added approximately 1,800 additional tariff lines for 35 sub-Saharan African countries, in addition to the 5,100 tariff lines already covered by the GSP. Most of the tariff lines not covered by either program are already effectively tariff-free under World Trade Organization commitments. The US Congress last renewed the AGOA in 2015, and it is due for renewal again in 2025.

For the past two decades, AGOA-eligible trade consisted primarily of oil exports, mainly from Nigeria and Angola, and—to a lesser extent—from Chad and the Republic of Congo. Non-oil imports under the AGOA have tripled since the program was introduced, fitting the broader pattern of diversifying trade. Oil products, motor vehicles, jewelry, ferrochromium and apparel were the largest import categories under the program in 2022. A recent review of the program by the US International Trade Commission (USITC) found that it was particularly effective in supporting the development of apparel industries in sub-Saharan Africa. The AGOA preferences covered 34 percent of all imports from AGOA-qualifying countries in 2022, with South Africa, Nigeria, Ghana and Kenya being the largest users.

Despite the benefits of the program and the near-term focus on its renewal, unilateral preference programs such as the AGOA and GSP have limited reach. They are, by nature, temporary, nonreciprocal and cover only selective goods. The USITC report found that the AGOA contributed little overall to sub-Saharan African growth, outside of a select few industries and countries. The AGOA is far less ambitious than other kinds of trade programs, such as free trade agreements (FTAs) or similar agreements.

An FTA between the US and one or more of the AGOA beneficiary countries is not imminent. In the meantime, the focus will be on preserving the market access benefits provided by the AGOA

US$ 44.8 billion

The US direct investment position in Africa totaled US$44.8 billion in 2021

"Under the AGOA, non-oil imports have tripled since the program was introduced in 2000, fitting the broader pattern of diversifying trade

while finding other ways to move the relationship forward. The 2022 US-Africa Summit produced new engagement tracks, and the USTR continues to negotiate a partnership arrangement with Kenya. These initiatives signal a desire by some to change the nature of trade relations between the US and the nations of Africa.

The US-Africa Summit

The US-Africa Summit in December 2022 signaled the Biden administration's desire to begin to [change the nature of the trade and investment environment](). The Summit featured top-level government-to-government talks and private sector engagement. The US government announced new support for the AfCFTA, called for Africa Union membership in the G20, and promised US$55 billion in aid over the next three years. The work program following the Summit will include new Millennium Challenge Corporation economic integration programs, a new President's Advisory Council on African Diaspora Engagement and a new initiative on Digital Transformation with Africa. President Biden appointed a Special Presidential Representative for US-Africa Leaders Summit Implementation to coordinate work on all these commitments.

Private and public sector investment and partnership commitments totaling US$15.7 billion were announced during the US-Africa Summit, with private business leaders expecting further deals to emerge from the Summit.

Since the Summit, the Vice President, Secretary of State, Treasury Secretary and UN Ambassador have visited the continent. Further engagement—including a possible presidential visit—is likely to follow. While visits by political leaders are no substitute for sustained economic opportunities, they can often indicate the government's desire to establish an economic and political framework for sustainable growth.

US-Kenya Strategic Trade and Investment Partnership

The US-Kenya Strategic Trade and Investment Partnership (STIP) is one of several agreements the Biden administration is exploring to deepen economic engagement with selected countries and regions. The Biden administration is currently pursuing the Indo-Pacific Economic Framework for Prosperity (IPEF) with countries in Asia-Pacific, and the Americas Partnership for Economic Prosperity (APEP) in the Western Hemisphere. These initiatives differ from a traditional FTA in several ways, most notably by the absence of significant market access commitments. In other words, unlike in a traditional FTA, the STIP is unlikely to contain specific commitments for each country to receive preferential access to the other's market. Agreements featuring "market access" commitments have fallen out of favor in the US, as they are generally viewed as being out of step with the current emphasis on sourcing domestically.

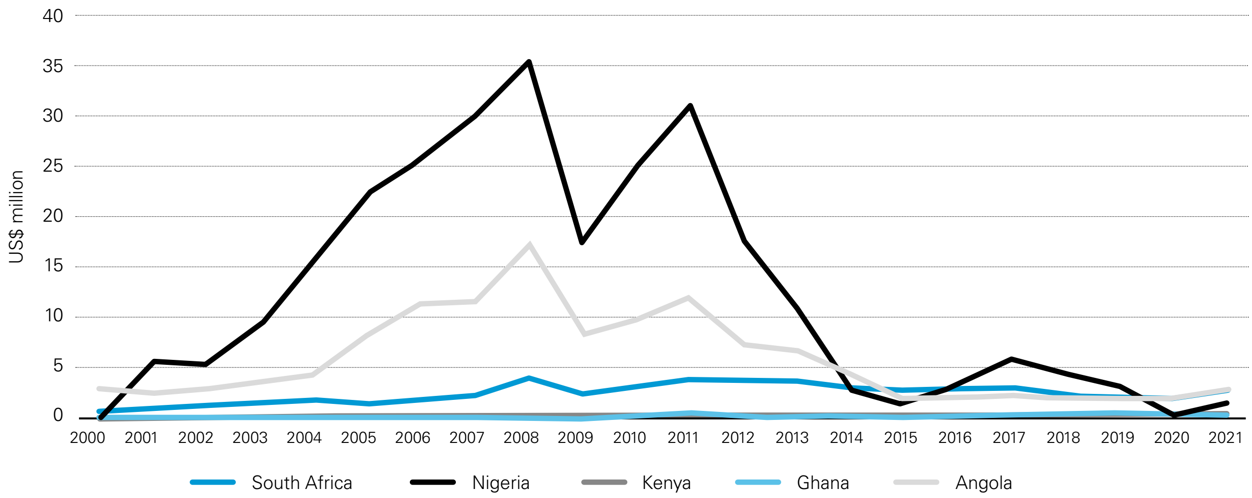
The STIP was first announced in a joint statement on July 14, 2022. After the initial discussions, the USTR and Kenya announced that the STIP would cover a range of topics, including agriculture, anti-corruption, digital trade, environment and climate change action, good regulatory practices, services, domestic regulation, micro-, small- and medium-sized enterprises, workers' rights and protections, participation of women, youth and other underrepresented groups in trade, standards collaboration, and trade facilitation and customs procedures. Broadly speaking, the STIP will cover the same issues as the IPEF and the APEP.

The Mosque-Madrassa of Sultan Hassan and the Egyptian pyramids in the background, Cairo, Egypt

> **"The US-Kenya Strategic Trade and Investment Partnership (STIP) is one of several agreements the Biden administration is exploring to deepen economic engagement with selected countries and regions**

Above view of Durban
Harbour, South Africa

US imports of AGOA-qualifying products from top-five countries 2021, trade values from 2000 to 2021



Source: US Census Bureau

The parties held the first detailed negotiations on April 17 to 20, 2023, in Nairobi, with proposed texts on several chapters being discussed, but not released to the public. The next negotiating round has not been announced yet, though the Kenyan government expects the talks to be concluded by the end of 2023 and that the final agreement could be signed by April 2024. This ambitious timeline is similar to those the USTR has proposed for the IPEF and the US-Taiwan Initiative on 21st Century Trade.

The Biden administration is calling STIP a model of engagement with other African countries. It is, however, less ambitious than a full FTA and will not provide the same benefits to traders and investors. Kenya, for its part, believes it can leverage STIP to negotiate a full bilateral FTA with the US in the future. The Biden administration has not committed to that, but the Trump administration's previous efforts to negotiate a bilateral FTA and support for the idea by some members of Congress indicate opportunity may exist in the future. The USTR-AfCFTA Secretariat Memorandum of Understanding signed at the US-Africa Summit may be another way to eventually approach an Africa-wide deal.

April 2024

The US-Kenya Strategic Trade and Investment Partnership (STIP) agreement could be signed by April 2024

Strong GDP growth forecasts for sub-Saharan Africa, but will sustainable actions follow?

According to the IMF, sub-Saharan Africa's GDP growth rates over the next five years will outpace the rest of the world. In the longer term, the World Bank forecasts that Africa will be home to approximately one-quarter of the global population by 2050. When Vice President Kamala Harris visited Ghana in March, USTR Katherine Tai tweeted "For the United States and the global economy—the future is Africa."

As Africa's population continues to grow and its economic potential expands, there is a growing recognition among global leaders of the need to engage more effectively with the continent. The US and other nations have expressed interest in shaping their policies to better support Africa's development, and there is a growing sense that Africa's role in the world is changing.

However, questions remain whether sustainable actions and policies will follow words and how effective these actions and policies will be. The US's choice to pursue less ambitious tools—such as the AGOA and STIP, instead of the more comprehensive FTA approach used in other regions—may be politically expedient, but will it be enough to make a meaningful impact? Conversely, can African nations make sufficient progress quickly enough in their attempts to deepen intra-continental integration to convince the private sector and foreign investors to be bolder with their initiatives? These questions loom large as countries seek to redefine their economic and trading relationships with Africa.

"The IMF forecasts sub-Saharan Africa's GDP growth rates over the next five years will outpace the rest of the world

Manganese mining
open pit, South Africa

Don’t let a crisis go to waste: Financing mining & metals projects in Africa in 2023

Financing new mines is and always has been a risky business. Long project timelines, price volatility, navigating political conditions, ESG risks and more are now colliding with rising interest rates and fears of a global economic downturn. Yet, amid geopolitical crisis and economic uncertainty, mining companies across Africa continue to find financing for the development of their projects, as **Rebecca Campbell**, **Kamran Ahmad** and **Gary Felthun** highlight.

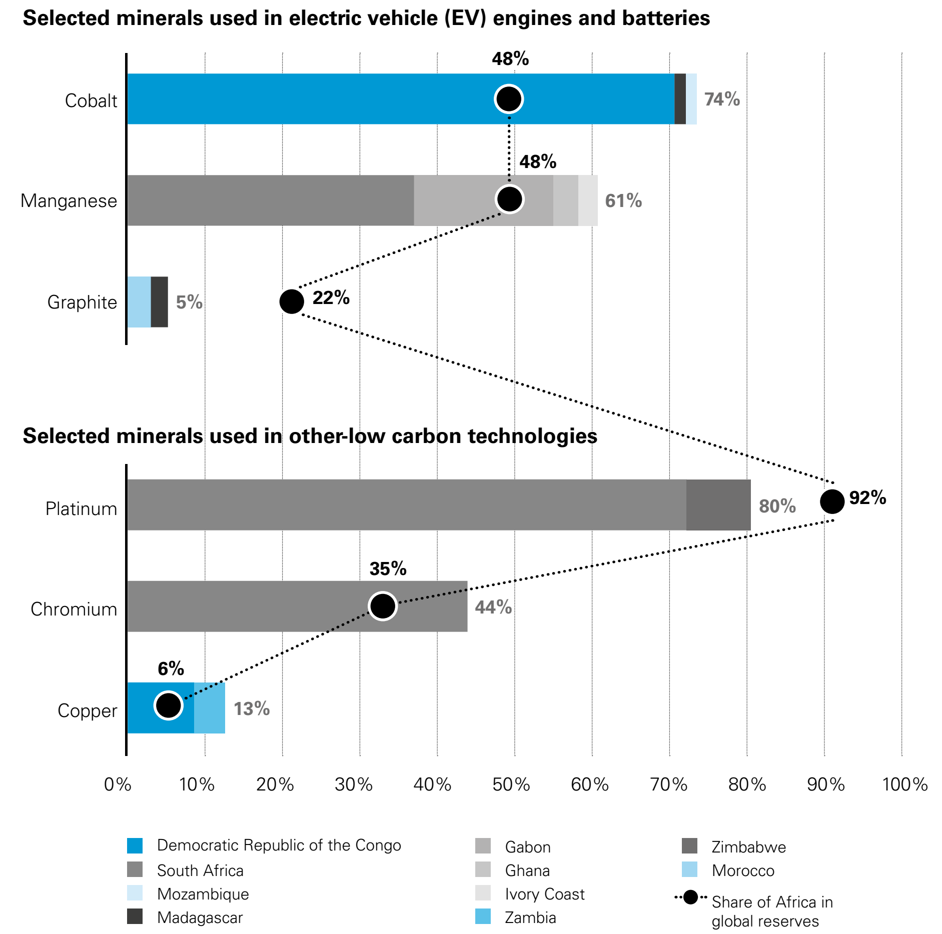
Mining & metals projects across Africa are benefiting from a sea change driven by the COVID-19 pandemic, acceleration of the energy transition and Russia’s invasion of Ukraine. Critical minerals and the mining sector more broadly have become part of energy security policies across developed markets. Industries buffeted by supply chain disruptions and ESG pressures also seek their own security as well, directly investing in or partnering with miners to secure supply.

Though the continent is home to as much as 30 percent of the world’s mineral reserves, as of 2022 it accounted for less than 10 percent of global mining exploration spending and less than 5 percent of the sector’s global revenue. Africa’s mineral wealth has therefore emerged as a key theatre in the race to secure the supplies needed to achieve decarbonization.

Small is beautiful

In 2022, there’s been an uptick of interest in smaller mining projects that point to larger changes occurring across the sector and region. Junior miners in Africa typically struggle to finance new projects because of the risks involved. They hold few assets, their exposure to commodity prices is highly concentrated, it can be

Share of African countries in the global production of selected minerals, 2021



Source: BDO

An open pit and underground diamond mine, Kimberley, South Africa

> Capital that has traditionally flowed into African oil & gas projects is now being redirected into mining, as funders adapt their portfolios in response to the energy transition

difficult to establish the value of early-stage projects and they're often comparatively unproven to lenders and potential partners. But even with tightening financial conditions, capital providers seem eager for the return that smaller mining projects generate, especially those producing critical minerals or high-grade iron ore.

Some of the shift in risk appetite is structural. Major mining companies have not invested significantly in exploration and development for the past decade. Now they're playing catch-up. Majors have begun participating in venture capital investments meant to accelerate the deployment of innovative technologies and finance exploration with junior miners. Firms are returning to Africa because of its immense untapped exploration potential. BHP, which exited its African assets in 2014, has acquired a 17 percent interest in Kabanga Nickel, a subsidiary of Lifezone Metals, which owns the Kabanga project in Tanzania.

Given the relative retrenchment of major miners and the significant cost of large M&A transactions, the near certainty of rising demand for most minerals is pushing investors to proactively seek out nascent, smaller projects in Africa to develop. This includes surging interest from startups linked to the tech world looking to secure long-term supply for the energy transition, for example, KoBold Metals, which announced plans to commit US$150 million to develop the Mingomba copper-cobalt mine in Zambia at the US-Africa Leaders Summit last December. Industrial manufacturers and metals firms have every reason to invest directly into small projects alongside junior miners if it helps efforts to reduce emissions across the value chain and target higher-grade finds to source ores that require less energy to beneficiate and refine in the first place. And we are seeing them do so using an array of structures ranging from traditional equity to royalties and streams to pre-pay financing—all (of course) paired with a substantial long-term offtake.

Capital's energy transition

The sector has traditionally not been associated with green financing, given historic ESG issues associated with many mining & metals operations, but acknowledgment of the crucial role the sector has to play in the energy transition is changing this dynamic. For example, Egyptian gold miner Centamin was recently able to access a US$150 million sustainability-linked revolving credit facility from a group of commercial bank lenders, a first for the country's mining sector. Interest in similar financing arrangements is steadily rising.

At present, there is no unified ESG framework to assess the impact of mining & metals projects. We expect this to shift as the sector becomes more vertically integrated within itself and with other industries. The Simandou iron ore project and smaller iron ore projects in sub-Saharan Africa producing high-grade ores can help steelmakers taking on sustainability-linked debt or facing regulatory pressures to minimize emissions and consume less electricity when running electric arc furnaces. Other miners are seeking opportunities to enter into value chains with hydrogen or combining project development with investments in renewable energy infrastructure, which may open up additional financing options in the years ahead.

Finally, capital that has traditionally flowed into African oil & gas projects is now being redirected into mining, as funders adapt their portfolios in response to the energy transition. High interest rates have similarly driven investors away from industries such as tech that have traditionally relied on loose financial conditions to finance rapid growth. Africa's wealth of unexplored and undeveloped mineral reserves has allowed miners to weather difficult economic and political conditions better than expected.

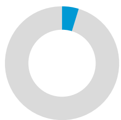
Security first

More interesting in the longer term, however, is the shifting political environment and its effect on investor preferences as well as lenders and investor mandates. US Undersecretary for Economic Growth, Energy, and the Environment Jose W. Fernandez attended the Mining Indaba in mid-February, noting "we don't have enough critical minerals to power the world's clean energy agenda, but our current supply chains for these minerals—from extraction to production to recycling—are simply not diverse enough for the energy future that's coming." US Treasury Secretary Janet Yellen is currently leading efforts with US allies to reform the World Bank and reorient its mission toward combatting climate change while supporting development, part of an expanding push in many developed markets to leverage existing trade finance or development institutions to more actively support critical minerals projects.

Anxieties about dependence on China's mining & metals complex are upping the pressure on export credit agencies, development financial institutions and commercial banks to lend into the mining sector to secure alternative sources of supply. The United States' Mineral Security Partnership—a program launched last June with the participation of 12 partner countries and the EU—aims to promote ethical mining practices across the sector's value chain in parallel with developing EU efforts to reform mine and refinery permitting processes and launch a central purchasing agency for critical minerals.

30%

Africa is home to about 30 percent of the world's mineral reserves



5%

As of 2022, Africa accounted for less than 5 percent of the global mining revenue

Considerable amounts of political capital are being spent on efforts to spur investment that comports with climate concerns and more rigorous ESG standards as a matter of geopolitical competition and security, not only return on investment or risk management.

At the same time, Chinese investors are taking advantage of the easing of COVID-19 restrictions and racing to secure critical mineral supply chains. Investors and miners from China generally have a higher risk tolerance, as well as the financial and technical capacity to advance projects quickly. Governments are also looking to leverage their existing relationships with Chinese firms to extract more value. The Democratic Republic of the Congo has been a salient example, as President Felix Tshisekedi looks to renegotiate deals signed in 2008 to increase Chinese investment into infrastructure and ensure that local labor is used for construction. In other areas, Chinese investors had a definitive edge as they're already on the ground. For instance, seven of nine of the existing large or more developed lithium projects across the continent are partially or completely Chinese owned.

Security factors are also at play. Promoting investment into the mining & metals sector on the continent provides jobs and revenues, and acts as a disincentive to migratory pressures. The European Investment Bank (EIB) and European Bank for Reconstruction and Development (EBRD), for example, both have active programs to provide equity and/or debt to projects on the continent. Sub-Saharan Africa alone hosts more then 18 million refugees and more than 14.2 million internally displaced people. The continent's relative youth—20 percent of Africa's population is between the ages of 15 and 24 years and comprises more than half of its workforce—poses significant problems for countries struggling to create enough new, paying jobs. Mining projects bring jobs and infrastructure investment, providing governments with new avenues to promote domestic refining and metals production for "green" supply chains. Building up metals production, especially when coupled with investments into renewable energy supplies and green hydrogen production, then creating an industrial base with considerable forward and backward links across supply chains will generate high levels of indirect employment and support greater economic complexity and diversification.

As tensions between the collective "West," Russia and China intensify, along with pressures to decarbonize, so will the race to secure financing for new projects and development across Africa. Africa's mining & metals sector stands to benefit.

Special thanks to Nick Trickett, Business Development Manager for the Mining & Metals Industry Group, for his assistance with this article.

"Promoting investment into the mining & metals sector on the continent provides jobs and revenues, and acts as a disincentive to migratory pressures

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