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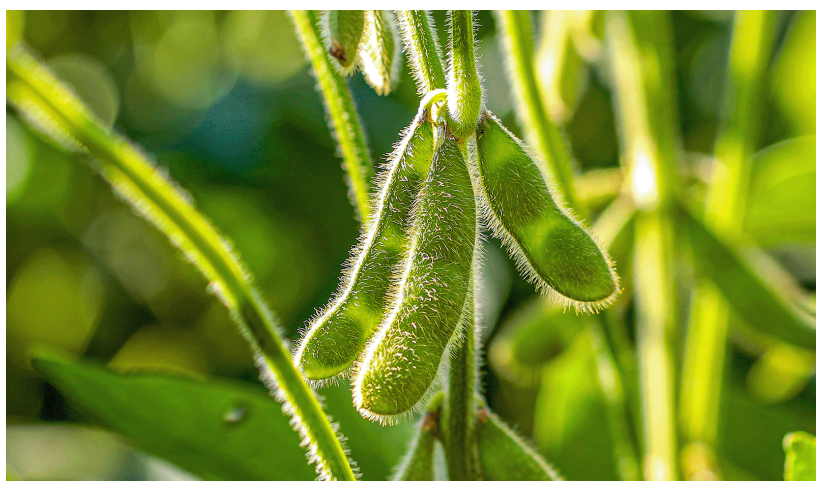
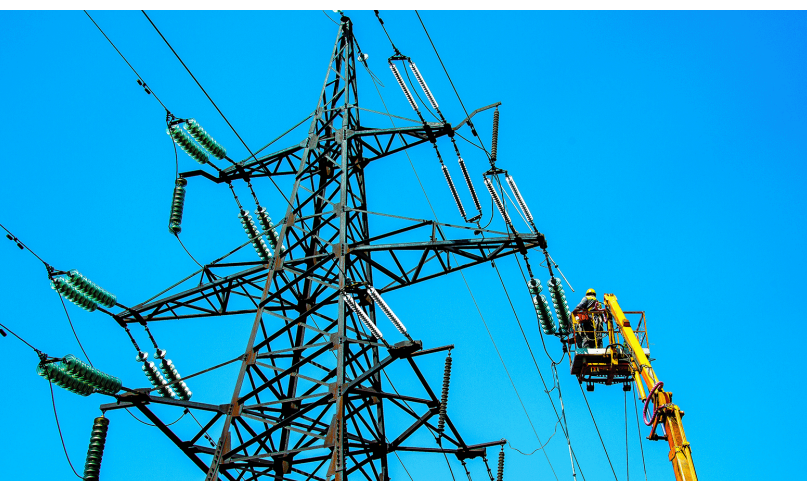
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Angola:

Country Private Sector Diagnostic



SEPTEMBER 2026

About the Country Private Sector Diagnostic

The private sector is an engine of long-term economic growth and a catalyst for global social and economic development. When functioning well, it promotes innovation and entrepreneurship, improves access to and the quality of economic opportunities, and supports the sustainable use of natural resources. In developing economies, the private sector creates the vast majority of jobs, generates tax revenue, and accounts for significant investment.

The Country Private Sector Diagnostic (CPSD) reports seek to unlock private investment and job creation through policy action to remove impediments to private investment. Prepared jointly by the institutions of the World Bank Group, each report analyzes specific sectors of the economy in which increased private investment could accelerate growth if appropriate policy and regulatory issues are addressed.

Designed from the perspective of an investor or entrepreneur, CPSDs seek to identify untapped private investment opportunities and the barriers that stand in their way (earlier reports can be found [here](#)). Subsectors of the economy are chosen based on their potential to attract private investment, create more and better jobs, generate domestic revenue, and foster sustainable, inclusive growth in response to targeted policy action. The report aims to help policy makers prioritize impactful actions that can be taken in the near term to remove disincentives to private investment, while delivering on broader development goals.

The CPSD is a core country diagnostic of the World Bank Group produced to guide the design and implementation of country strategies, public and private investment projects, budget support operations, advisory services, and other analytical work. It is intended to be of interest to domestic and foreign investors, government officials, Bank Group staff and management, civil society, and other development partners.

CPSDs are a central instrument of the World Bank Group's jobs agenda as articulated in the 2025 Development Committee (DC) Paper on [Jobs: The Path to Prosperity](#), which emphasizes translating private sector development into large-scale employment opportunities. CPSDs support this agenda by providing country-level, sector-specific diagnostics that help identify systemic barriers to private investment critical to job creation. They also align with the DC's three-part approach to private sector development and job creation: investing in human capital and infrastructure to establish the basic preconditions for job, supporting business-enabling policies, and mobilizing private capital at scale to help firms create more and better jobs.

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Acknowledgments

This Country Private Sector Diagnostic was produced by a team of World Bank Group staff and consultants led by Marcos Vaena and Sunita Varada. The team included Elsa Nabenge Shichilenge, Mila Malavoloneque, Ondrej Schneider, Pilar Salgado Otonel, Sudha Bala Krishnan, Alejandro Rueda-Sanz, Nathan Rohat Ergonul, Nuno Alexandre Guerreiro Pedro, and João Alberto Oliveira Das Dores Guerreiro. Adama Badji and Neusa Monteiro dos Santos provided administrative support. The extended team included Ganesh Rasagam, Stephan Dreyhaupt, Vasco Nunes, Michelle Gomes Souto, Stefan Ott, Carina Coimbra Costa, Marcelino Mouammar Jose Ferreira, Leonardo Kilele Tshama, Luisa Texeira De Melo De C Felino, Olena Koltko, Natsuko Toba, Persephone Economou, and Henriques Cabula. Editorial support was provided by Hilary Johnson and Scott Wenger.

The team is grateful for the feedback and guidance from Roland Yameogo, Juan Carlos Alvarez, Yosuke Kotsuji, Ayobambo Salami, and Marcel Bruhwiler.

The team is also grateful for the guidance of Paolo Mauro, Albert Zeufack, Claudia Conceição, Jeffrey Chelsky, Paramita Dasgupta, and Consolate Rusagara.

Peer reviewers at different stages in the preparation of the Diagnostic were Zenaida Hernández, Benedicte Baduel, Luciana Harrington, Denny Mahalia Lewis-Bynoe, Hope Pachena, R. Balaji, Samuel Oguah, Izabela Leão, Denis Medvedev, and Zeinab Partow.

The team is especially thankful to government officials, private sector representatives, development partners, and other stakeholders who provided data and valuable insights for the preparation of this report.

Executive Summary

Angola stands at a critical juncture as it transitions from oil-dependent growth toward a diversified, private sector-led economy.

While hydrocarbons still dominate—accounting for 95 percent of exports and over 60 percent of government revenues in 2024—declining oil output and declining foreign investment in extractives have exposed the limits of this model. Since 2017, the government has pursued fiscal and structural reforms, including state-owned enterprise (SOE) restructuring and new investment laws, to restore stability and enable diversification.

Angola's recent efforts to diversify its economy have created substantial opportunities for private sector investment. The country is endowed with abundant arable land and water, significant natural gas and renewable energy potential, a young labor force, one of Sub-Saharan Africa's most urbanized populations, and strategic access to regional markets through the Lobito Corridor and the African Continental Free Trade Area. The challenge ahead is to channel Angola's capital and natural endowments toward nonoil sectors to build integrated value chains that serve growing domestic and regional demand for food, energy, and industrial goods.

Attracting private investment can contribute to the economy's structural transformation away from heavy reliance on hydrocarbon extraction. Foreign direct investment in extractives has been declining since 2017, discouraged by a complex bureaucracy and inconsistent enforcement of regulations. The private sector is dominated by micro, small, and medium enterprises with low productive capabilities and limited access to capital, skills, and markets. Employment remains overwhelmingly informal.

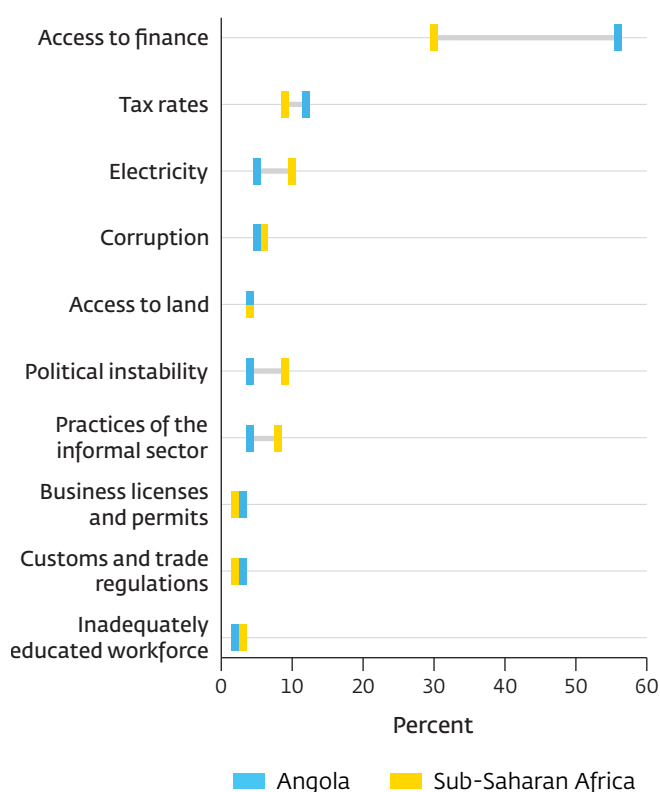
Angola's private sector faces significant hurdles. The current macroeconomic context is marked by high inequality, a high poverty rate, and a sharp decline in gross domestic product (GDP) per capita from its peak in 2014. The private sector faces deep structural challenges that constrain growth and discourage investment, despite sustained policy efforts. In the 2024 World Bank Enterprise Surveys, more than half of firms in manufacturing, retail, and services considered unaffordable and limited financing as their main concern, followed by taxes, unreliable power supply, and access to land (figure ES.1). The banking sector remains underdeveloped, with private loans amounting to only 7.4 percent of GDP. SOEs dominate strategic sectors, although reforms aim to reduce their dominance

and reposition the state as a facilitator of private enterprise. The government launched a second phase of privatization in 2023, targeting 73 companies, including the national oil company and airline. According to the national privatization program (Programa de Privatizações; PROPRIV), 121 of 170 assets have been privatized since 2019, generating over US\$760 million in receipts to the state. Among the most valuable assets sold so far are stakes in companies in the financial sector, such as the Banco de Fomento de Angola, as well as industrial units and hotel ventures.¹

Angola ranks poorly across several governance dimensions that matter to private investors, including regulatory quality and corruption (figure ES.2). Its government effectiveness score is significantly below that of its structural peers at the

Figure ES.1

Access to Finance, as Well as Taxes, Electricity, and Access to Land Are Major Business Obstacles, 2024

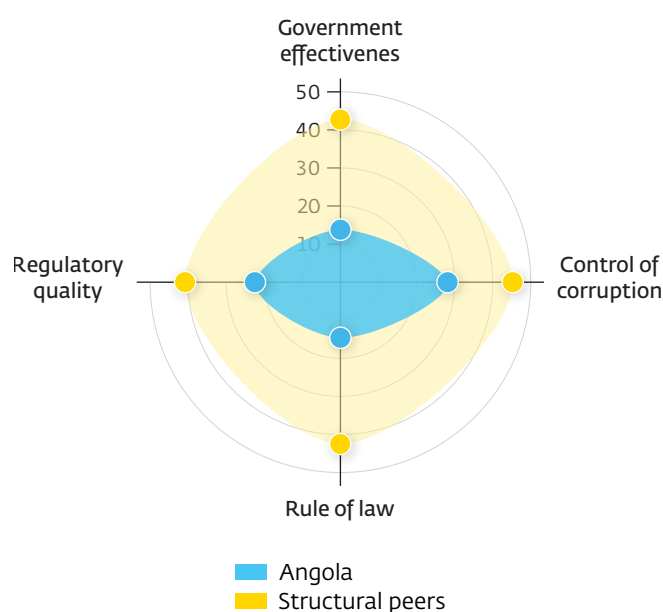


Source: World Bank Enterprise Surveys.

Figure ES.2

Angola Trails Its Peers in Key Governance Aspects of Importance to Private Investors

Worldwide Governance Indicators, Angola vs. Structural Peers, 2023



Source: Kaufmann and Kraay (2023).

Note: For each governance dimension, the length of the axis reflects the percentile rank of a country relative to all other countries in the world. Scores range from 0 (lowest performance) to 100 (highest performance). On this radial chart, larger negative values on the left and bottom axes correspond to higher percentile rankings and stronger governance performance. Structural peers include Botswana, Ghana, Kenya, Nigeria, Rwanda, Tanzania, and Zambia.

14.6th percentile in 2023, compared with 43.0 for its structural peers. This reflects weaknesses in the quality of public services and policy implementation. Regulatory quality and rule of law scores are also comparatively low, while corruption perceptions remain high, placing Angola in the bottom quartile globally. These weaknesses hinder market efficiency and private sector investment. Unlocking the country's economic potential necessitates a stronger role for private investment, supported by a diverse range of reforms aimed at improving government effectiveness and strengthening the rule of law.

This Country Private Sector Diagnostic (CPSD) takes an investor perspective to identify selected sectors in which private investment could be boosted if concrete policy actions are taken to remove impediments. The selection of sectors followed a rigorous, systematic process that includes analysis of quantitative and qualitative indicators, subject to data availability, and stakeholder consultations, including interviews with private investors, companies, technical experts, policy makers, and development partners. The criterion for selecting sectors was whether they could attract significant private investment over the medium term if well-identified constraints could feasibly be addressed by the public sector in the near term. Recognizing that an element of judgment is involved, the selection is not intended to be exhaustive. Rather, it aims to facilitate focused analysis and specific recommendations.

This CPSD identifies three sectors of the economy where certain policy actions can generate commercially viable opportunities for private investors: poultry feed; chemicals, particularly olefins and fertilizers; and independent power transmission (IPT). With improvements in the enabling environment, each of these sectors has the potential to contribute to growth, job creation, and development. **Poultry feed** was selected based on Angola's cost competitiveness in soybean production, rising domestic and regional demand for animal protein, and the sector's potential contribution to job creation, food security, and economic diversification. **Olefins and fertilizers** hold significant untapped investment potential, as they can provide key raw materials for the creation of diversified value chains, especially in higher-value-added petroleum products. **IPT** can play a critical role in the development of Angola's electricity transmission network, reducing capital demand on the state, and enabling regional exports.

Poultry Feed

Angola has the staples needed to produce the main ingredients for the poultry-feed industry competitively, namely soybeans and maize. Production of these crops has grown considerably over the past decade, with total soybean production volumes expanding annually by nearly 14 percent, on average, and maize production by 7.4 percent. Soybean production, in particular, benefits from cost advantages due to lower fertilizer requirements compared with maize. However, soybean yields remain below regional peers, while maize yields have stagnated. Low maize and soybean yields limit the competitiveness of the domestic feed and poultry industries, where feed accounts for 60 to 75 percent of total production costs. Increasing yields of both crops is therefore essential to improving the cost competitiveness of the poultry-feed value chain.

Grains and feed production face structural challenges that limit productivity and investment. Angola's smallholder farmers have low yields due to limited access to improved seeds, inputs, technical support, finance, and digital tools, while restrictions on genetically modified seeds and weak seed markets discourage private investment. Land-related issues, unclear surface rights, and tenure insecurity hinder large-scale farming, and the absence of legal frameworks for outgrower schemes and grain standards complicate supplier aggregation and feed mill operations. Together, these constraints lower productivity, limit grain supply, and undermine the competitiveness of the domestic feed and poultry sectors.

The Angolan government is actively promoting investments to boost grain and animal protein production. The PLANAGRÃO (Plano Nacional de Fomento para a Produção de Grãos; National Plan to Promote Grain Production) aims to invigorate domestic production of essential grains, while the PLANAPECUÁRIA (Plano Nacional de Fomento e de Desenvolvimento da Pecuária; National Plan for the Promotion and Development of Livestock) aims to achieve food self-sufficiency by boosting domestic production of meat, milk, eggs, and poultry. These efforts seek to increase farmers' incomes, expand the sector's contribution to GDP, reduce reliance on imports by strengthening the meat production value chain, and enhance Angola's capacity to meet domestic consumption needs while creating export potential. They form part of the broader National Development Plan 2023–2027 to diversify the economy beyond oil.

By adopting sector-specific reforms, Angola could significantly increase domestic feed and poultry production over the medium term, enabling over US\$600 million in investments opportunities and generating around 20,000 jobs. Priority reforms include streamlining access to land for commercial agriculture, increasing productivity through improved seeds, and strengthening the legal framework for outgrower schemes.

Figure ES.3

Angola's Untapped Harvest: Fueling a Competitive Poultry Sector

High cost of dependency



Imports dominate, foreign exchange drains
84% of poultry is imported, draining **US\$400–500 million** in foreign currency each year.



Feed costs squeeze competitiveness
Feed represents **60–75%** of production cost; high prices and unreliable supply are the main bottleneck.

Zambia

2,300
kg/ha

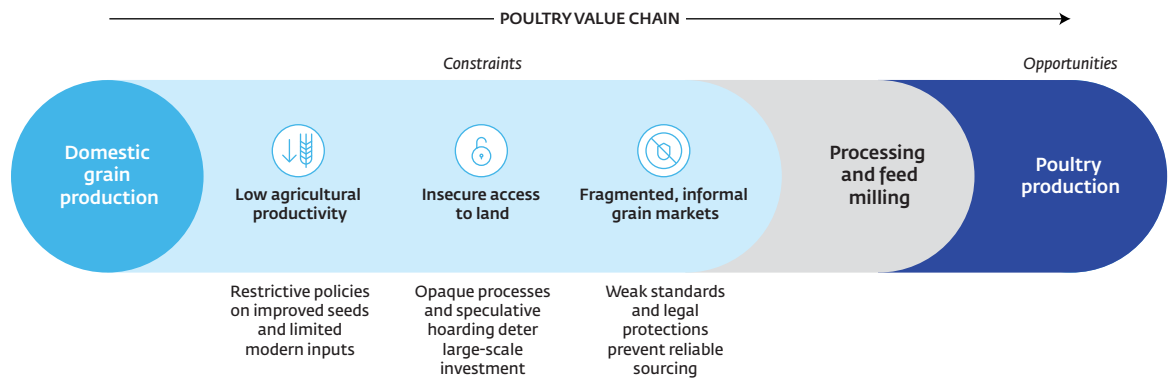
Low grain yields raise feed costs

Angola produces **1,150 kg/ha versus 2,300 kg/ha** in Zambia, raising feed costs.

Angola

1,150
kg/ha

Key investment barriers



Priority reforms



Modernize seed regulations

Establish plant variety protection laws and a phased, risk-based biosafety framework.



Enforce land-use policies

Apply “use-it-or-lose-it” provisions and create prescreened agro-industrial zones.



Formalize the grain market

Adopt official quality standards and a legal framework for outgrower contracts.

Potential impact

50%

A **50%** increase in grain yields could reduce feed prices by up to **20%**.

US\$600 million

Targeted reforms could attract more than **US\$600 million** private investment into grains, feed milling, and poultry.

20,000 jobs

Investment could create **20,000 jobs** across rural and industrial sectors.

Olefins and Fertilizers

Angola is the second-largest hydrocarbon exporter in Sub-Saharan Africa. The government's 2025 Natural Gas Master Plan emphasizes the development of a domestic petrochemicals industry to improve the value chain, diversify the economy, and create jobs. The 2018 Nonassociated Gas Law clarified gas concessions and commercialization rules, encouraging private participation. Together, these initiatives create opportunities for domestic value addition, industrial growth, and job creation.

Global demand for high-value chemicals is expected to grow more than twice as fast as demand for refined products, prompting oil companies to integrate along the petrochemicals value chain. Core building blocks, including aromatics, olefins, such as ethylene, propylene, and butadiene, and methanol, underpin over 90 percent of organic chemical compounds and are transformed into derivatives used across industries such as textiles, appliances, furniture, and automotive manufacturing.

Demand for olefins is rising, especially in Sub-Saharan Africa and Asia, driven by population growth, industrialization, and increased use of lightweight materials. Ammonia-based fertilizers, like urea, which rely on natural gas and hydrogen from olefin production, are vital for agriculture. Developing domestic fertilizer production in Angola could lower costs, improve farmer access, and enhance food security. The country also has strong potential to produce olefins and ammonia using natural gas liquids from liquefied natural gas processing and feedstocks from upcoming refinery projects in Luanda and Lobito, enabling integrated petrochemical growth. Angola could become a competitive source of many essential chemicals for countries in the Southern African region.

However, the nascent petrochemicals industry lacks a dedicated legal framework and faces high capital costs, long payback periods, and burdensome entry requirements that deter investment. Limited access to competitively priced domestic gas, weak industrial infrastructure, fragmented planning, and the absence of a coordinating policy body further hinder development. Future competitiveness will rely on adopting sustainable technologies, meeting emerging standards to avoid future trade barriers, and overcoming financing constraints in key export and financing markets.

Targeted reforms in this sector could enable US\$3.6 billion in private investment, create about 42,600 jobs by 2036, and position Angola as a leading industrial hub in Sub-Saharan Africa. Angola can unlock its petrochemical and fertilizer potential by adopting clear legal frameworks, ensuring reliable feedstock, developing world-class infrastructure, and streamlining regulations.

Figure ES.4

Angola: Unlocking a Gas-to-Growth Future

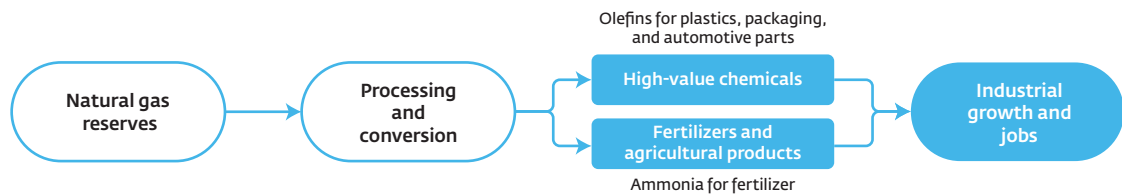
Forgone opportunity



100%

Angola is a leading African hydrocarbon exporter but imports **100%** of its petrochemicals, forgoing an opportunity to add value to domestic natural gas.

Gas-to-value pathway



Untapped opportunity

5.8 trillion cubic feet

Angola has **5.8 trillion cubic feet** of proven natural gas reserves

These reserves remain largely underused for domestic value addition.

The domestic petrochemicals industry is undeveloped.

Key investment barriers



No dedicated legal framework

The absence of a clear sector law limits investor certainty.



Unreliable gas access

Investors lack dependable access to competitively priced gas.



Insufficient infrastructure

The sector lacks dedicated industrial infrastructure.

Priority reforms



Enact a petrochemicals law

Establish a clear legal framework and investor certainty.



Develop a gas-to-chemicals zone

Create specialized, dedicated industrial infrastructure.



Guarantee domestic gas supply

Provide reliable feedstock access with transparent pricing.

Potential impact

US\$3.6 billion

Estimated investment attraction with successful reforms.

42,600

Approximately **42,600 jobs** by 2036.

Independent Power Transmission²

Angola struggles to harness its power generation capacity to meet industrial and regional demand. Despite rapid growth in generation, limited transmission infrastructure and the lack of interconnection with the Southern African Power Pool leave much capacity underutilized. Nearly all electricity comes from publicly owned plants managed by the public electricity company (Empresa Pública de Produção de Electricidade [PRODEL]). Electricity access is uneven, with urban areas better served than rural regions. Limited interconnections with southern Angola also prevent the country from tapping into this region's solar potential, resulting in higher costs and reduced supply quality.

Angola has opportunities to link power generation with industrial demand domestically and abroad. In 2023, the state-owned national transmission network received over 41 expressions of interest from high-voltage industrial customers willing to pay above regulated prices. IPT projects can connect these clients to remote power plants, allowing operators to negotiate electricity prices directly while paying connection fees and regulated tariffs to PRODEL and the Regulatory Institute for Electricity and Water Services (Instituto Regulador dos Serviços de Electricidade e das Águas). IPTs can also generate foreign currency, support Angola's integration with the Southern African Power Pool, and attract private capital.

Angola's electricity sector offers significant opportunities for private investment but faces legal, regulatory, and financial barriers. The July 2025 revision of the General Electricity Law clarified private participation and removed the single-buyer obligation from Rede Nacional de Transporte de Electricidade (National Electricity Transmission Network; RNT). However, secondary legislation is needed to define market operations, tariffs, power purchase agreements, and investor protections. Tariff regulations do not cover payments from generators like PRODEL to IPT operators, limiting revenue and investment opportunities. The absence of an updated least-cost, geospatial power sector master plan, weak provisions in power purchase agreements, and foreign investment and job quota requirements that are not adapted to the power sector create further uncertainty. Domestic investors also lack long-term local currency financing, increasing reliance on US dollar loans and foreign exchange risk. Addressing these gaps is critical to attract private funding, manage growing electricity demand, and support efficient sector development.

Targeted reforms in the IPT sector could unlock investment to build up to 12,000 kilometers of new power lines and, over the next 10 years, generate an estimated US\$9.2 billion in investment and 89,000 direct jobs. These estimates include private investment in 52 IPT projects identified by RNT in Angola and neighboring countries, supplying up to 8.1 gigawatts.

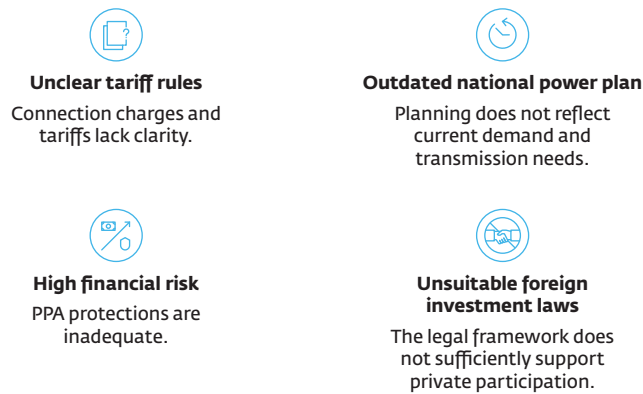
Figure ES.5

Angola's Power Paradox: Unlocking Investment in Electricity Transmission

Power paradox



Key investment barriers



Priority reforms



Potential impact



Table ES.1

Summary of Recommendations

Constraint	Recommended actions
Poultry feed	
1. Low productivity of the maize and soybean subsectors. Low productivity, especially in the maize subsector, significantly hampers the availability and competitiveness of locally produced grains in Angola.	1a. Introduce a targeted, climate-smart input e-voucher program covering drought-tolerant, early-maturing maize seed and complementary fertilizer, delivered through accredited private agro-dealers who also provide basic agronomic advisory. Farmer copayment should decline over time (e.g., after three seasons) to build graduation pathway toward unsubsidized purchasing. 1b. Complement with regulatory reforms enabling input financing through warehouse-receipt systems and risk mitigation tools such as crop insurance. <i>Responsible government entities:</i> MINAGRIF, MINFIN, MINDCOM, SENSE, and IDA.
2. Restrictive policies on genetically modified (GM) organisms. Import ban of GM seeds hampers access to high-yielding seed varieties.	2a. Phase in the regulated importation and use of GM seeds, under the supervision of the Comité de Sementes Geneticamente Modificadas (GM Seed Committee; CSGM). 2b. Draft and adopt a biosafety framework law aligned with the Cartagena Protocol on Biosafety and regional good practices, including those of the Southern African Development Community (SADC) and Common Market for Eastern and Southern Africa. <i>Responsible government entities:</i> CSGM, SENSE, MINAGRIF, INAC, MINAMB, and IGCA.
3. Absence of a legal framework for plant variety protection in Angola. Intellectual property is unprotected, discouraging the entry of world-class seed technology, impeding improvements in agricultural productivity, and keeping animal feed industry dependent on lower quality and less productive seeds.	3. Prioritize the development and enactment of a national plant variety protection law consistent with the International Union for the Protection of New Varieties of Plants 1991 Act. This allows proven regional genetics to enter into the Angolan market faster.* <i>Responsible government entities:</i> MINAGRIF, MINJUSDH, Instituto Angolano da Propriedade Industrial (Angolan Institute of Industrial Property), SENSE, Instituto de Investigação Agronómica (Institute for Agricultural Research).
4. Absence of sanctions for nonuse of productive land. Areas with high agricultural potential that are partially served by infrastructure, such as access roads, electricity, and agro-dealers, are underutilized and subject to intense commercial speculation.	4. Update the registry of land allocation permits in high-potential agricultural zones and enforce use-it-or-lose-it provisions. <i>Responsible government entities:</i> MINAGRIF, IGCA, and MAT.

(Table continues next page)

Table ES.1

Summary of Recommendations (*continued*)

Constraint	Recommended actions
5. Slow and rigid process for obtaining surface rights. The Land rights allocation process for commercial agriculture is slow, rigid, and opaque. Investors face high entry costs, long delays, and elevated risk premiums.	5a. Create a zone registry identifying strategic agro-industrial investment areas with prescreened land availability. 5b. Harmonize the Land Law (Law No. 9/04) and Local Government Law (Law No. 27/19) with Presidential Decree No. 84/25, which establishes the single window for land rights concession. <i>Responsible government entities:</i> IGCA, MINAGRIF, and MAT.
6. Lack of specific legal instruments governing outgrower schemes. The expansion of outgrower schemes in Angola remains limited due to lack of legal clarity and dispute-resolution mechanisms.	6. Introduce a standardized, legally recognized model contract for farmers and off-takers, supported by simple registration and enforcement procedures to scale outgrower schemes. <i>Responsible government entities:</i> MINAGRIF, MINJUSDH, MINDCOM, and IDA.
7. Lack of quality standards for grains. Angola's absence of formal grain standards creates inconsistent quality, weak contract enforceability, and costly disputes across the domestic grain and feed market.	7. Adopt grain standards harmonized with those of the SADC. <i>Responsible government entities:</i> MINAGRIF, MINDCOM, MINSA, and INIQ.
8. Absence of mandatory feed quality standards and labeling requirements. This absence undermines market development and discourages investment in feed manufacturing, allowing low-quality products to undercut compliant producers, compressing margins for mills investing in quality control, and exposing poultry farmers to inconsistent feed performance.	8. Adopt mandatory compound feed quality standards, including minimum nutrient content specifications, mycotoxin limits, and labeling requirements for all commercially sold animal feed, enforced through periodic sampling and testing by INIQ. <i>Responsible government entities:</i> MINAGRIF, MINDCOM, MINSA, and INIQ.
Petrochemicals: olefins and fertilizers	
1. Regulatory and financial barriers to private investment. High upfront guarantees, rigid contracts, and fragmented licensing deter investors.	1a. Enact a Petrochemicals Legal and Regulatory Framework consolidating licensing, land, environmental, and fiscal provisions. 1b. Eliminate 50 percent project cost guarantee; replace with performance-based milestones. 1c. Introduce flexible gas supply contracts with ramp-up periods and price adjustment clauses.

(Table continues next page)

Table ES.1

Summary of Recommendations (*continued*)

Constraint	Recommended actions
	1d. Implement transparent, competitive tendering for petrochemical projects. <i>Responsible government entities:</i> ANPG and AIPEX.
2. Limited and unreliable domestic feedstock supply. Lack of visibility to long-term supply of feedstock reduces investor confidence.	2a. Enforce elimination of routine flaring and channel gas into a national aggregation system prioritizing domestic use. 2b. Renegotiate Angola Liquefied Natural Gas framework to allocate fixed domestic volumes at transparent prices. 2c. Establish formula-based industrial gas pricing indexed to regional benchmarks. <i>Responsible government entities:</i> ANPG and Sonangol.
3. Inadequate enabling infrastructure and industrial sites. Absence of preserviced industrial zones with gas connectivity increases costs.	3a. Designate Soyo (or similar) as gas-to-chemicals industrial zone. 3b. Grant special industrial zone status with foreign ownership rights, streamlined permitting, and fiscal incentives. 3c. Develop shared utilities (water treatment, cogeneration) to reduce capital expenditure. <i>Responsible government entities:</i> MIREMPET, ANPG, MINDCOM, and AIPEX.
4. Lack of institutional coordination across energy, industry, and agriculture. Fragmented institutional coordination and misaligned incentives.	4. Create an interministerial gas-to-chemicals task force to coordinate feedstock allocation, infrastructure planning, and investment promotion. <i>Responsible government entities:</i> MINPLAN, MIREMPET, MINDCOM, MINFIN, MINAMB, ANPG, Sonangol, and AIPEX.
5. Limited environmental and climate alignment. Lack of green standards risks future trade barriers and financing constraints.	5a. Introduce sustainability-linked incentives for plants adopting carbon capture or green hydrogen. 5b. Align environmental permitting with international standards and principles. <i>Responsible government entities:</i> MIREMPET, MINDCOM, MINAMB, and ANPG.

(Table continues next page)

Table ES.1

Summary of Recommendations (*continued*)

Constraint	Recommended actions
Independent power transmission	
1. Inadequate tariff regulations. Electricity tariff regulations do not cover the prices that the power generator, PRODEL, may charge IPT operators to connect to the generator and purchase power.	1. Establish a connection fee and a power purchase price per kWh for IPTs from PRODEL. <i>Responsible government entities:</i> MINEA, PRODEL, and IRSEA.
2. Outdated power sector masterplan. Angola lacks an up-to-date least-cost geospatial power sector master plan that reflects the amendment to the General Energy Law, increasing uncertainty for potential private investors.	2. In the current long-term power sector plan, Angola needs to update the following: (1) demand projections, (2) assessment of the technical and economic potential of all energy sources, and (3) prioritization of projects based on national development goals; while also making the plan publicly available. <i>Responsible government entities:</i> MINPLAN, MINEA and MINFIN.
3. Unclear dispute settlement mechanisms in direct agreements between PPA entities. The absence of direct agreements among entities to PPAs, including the IPT operator or offtaker, the power generator, and lenders, limits the ability to mitigate risks faced by private investors.	3. Adopt and publish legislation on dispute settlement mechanisms between PRODEL and IPT investors. <i>Responsible government entities:</i> MINEA, PRODEL, MINFIN, and MINJUSDH.
4. Absence of compulsory job quotas for national workforce. Compulsory national workforce quotas for foreign investment projects have not been modified to contain specific provisions appropriate for the power sector.	4. Revise Article 46 of the Private Investment Law on mandatory employment quotas in foreign private sector projects to allow flexibility for the power sector. <i>Responsible government entities:</i> MAPTSS.

Note. ANPG = Agência Nacional de Petróleo, Gás, e Biocombustíveis (National Agency of Petroleum, Natural Gas, and Biofuels); IDA = Instituto de Desenvolvimento Agrário (Institute of Agrarian Development); IGCA = Instituto Geográfico e Cadastral de Angola (Geographic and Cadastral Institute of Angola); INAC = Instituto Nacional da Criança (National Institute of Children); INIQ = Instituto Nacional das Infra-Estruturas de Qualidade (National Institute for Quality Infrastructures); IRSEA = Instituto Regulador dos Serviços de Electricidade e de Água (Regulatory Institute of Water and Electricity Services); MAT = Ministério da Administração do Território (Ministry of Territorial Administration); MINAGRIF = Ministério da Agricultura e Florestas (Ministry of Agriculture and Forestry); MINAMB = Ministério do Ambiente (Ministry of the Environment); MINDCOM = Ministério da Indústria e Comércio (Ministry of Industry and Commerce); MINEA = Ministério da Energia e Águas (Ministry of Water and Energy); MINFIN = Ministério das Finanças (Ministry of Finance); MINJUSDH = Ministério da Justiça e dos Direitos Humanos (Ministry of Justice and Human Rights); MINSA = Ministério da Saúde (Ministry of Health); MIREMPET = Ministério dos Recursos Minerais, Petróleo e Gás (Ministry of Mineral Resources, Oil and Gas); IPT = independent power transmission; PRODEL = Empresa Pública de Produção de Electricidade (Public Electricity Production Company); SENSE = Serviço Nacional de Sementes (National Seed Service); AIPEX = Agência de Investimento Privado e Promoção das Exportações de Angola (Agency for Private Investment and Exports Promotion).

*Since the report's analysis was completed, the government of Angola has enacted Presidential Decree No. 151/26 of August 20, 2026, establishing a national Plant Variety Protection (PVP) framework administered by the National Seed Service (SENSE), aligned with the SADC PVP Protocol and consistent with UPOV 1991 standards.

1 Country Context and Business Environment



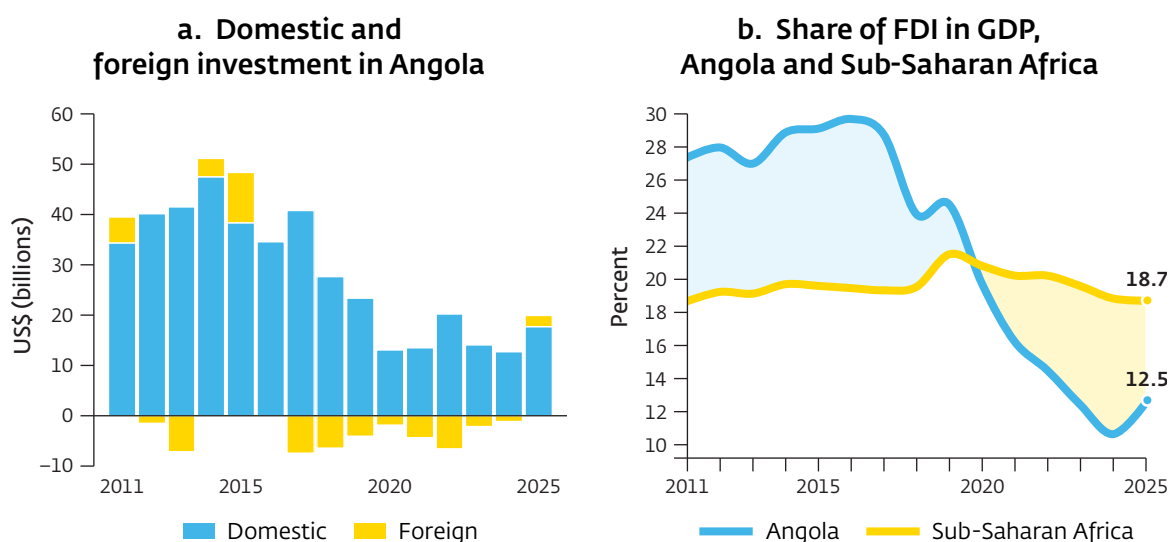
Angola is at a turning point in its development trajectory. After nearly two decades of oil-fueled growth, the economy faces the challenge—and opportunity—of transitioning toward a more diversified, resilient, and inclusive growth model.

Declining oil output and revenues have underscored the limits of a hydrocarbon-dependent economy, while ongoing macroeconomic and structural reforms are laying the foundation for private investment in nonoil sectors. Since 2017, the government has undertaken several fiscal and structural reforms, including state-owned enterprises (SOEs) restructuring, improved transparency, and new investment laws, to restore macroeconomic stability and foster private sector growth.³

Angola has the assets and strategic location needed to provide attractive opportunities for broad-based private investment. The country is endowed with abundant arable land and water resources, significant hydropower and renewable energy potential, a young and growing labor force, and expanding regional market access through the Lobito Corridor and the African Continental Free Trade Area. With one of the most urbanized populations in Sub-Saharan Africa—over two-thirds of Angolans now live in cities—the country faces rising demand for food, energy, and industrial goods, alongside opportunities to build integrated value chains closer to its expanding domestic and regional markets.

Figure 1.1

Aggregate Investment Remains Well above Sub-Saharan Africa Average, but Declining Net FDI



Source: Instituto Nacional de Estatísticas, Banco Nacional de Angola, Haver.

Note: FDI = foreign direct investment; GDP = gross domestic product.

These trends present Angola with an opportunity to shift toward a more diversified and sustainable private sector-led growth model. The economy has been exceptionally reliant on hydrocarbons extraction, which represented 95 percent of all export revenues and contributed more than 60 percent of all government revenues in 2024.⁴ Angola's capital base remains relatively strong, despite a pronounced decline in the aggregate investment rate since 2019. Private investment has dominated overall investment, but it has been heavily concentrated in the extractives sector, and its share of GDP declined from a robust 20 percent before 2020 to 7–8 percent in 2024–25. Moreover, foreign direct investment (FDI) inflows in extractives were negative during 2017–24, with only a tentative recovery in 2025, as major oil companies reduced their exposure because of depleting reserves, complex and slow bureaucracy, and inconsistent enforcement of existing regulations.

1.1

Economic and Fiscal Context

Angola is emerging from a prolonged economic downturn that began with the decline in oil prices in 2014 and was exacerbated by the COVID-19 pandemic. GDP growth slowed from 5.0 percent in 2024 to an estimated 3.1 percent in 2025 and is projected by the World Bank to average 2.8 percent annually between 2026–28. At the same time, GDP per capita in constant 2021 US dollars declined from its peak of US\$11,700 in 2014 to US\$8,700 in 2024, a contraction of more than one-quarter. The poverty rate reached 31.1 percent in 2024. Angola has long been characterized by high inequality, with a Gini coefficient of 51.3 in 2024, the sixth highest in Africa.⁵

Strong fiscal efforts and large increases in nominal GDP resulted in a decline in Angola's public debt from nearly 120 percent of GDP in 2020 to 51 percent by the end of 2025, according to World Bank estimates.⁶ Most of this debt is external, standing at US\$48 billion at the end of 2024, with commercial loans representing the largest share, at US\$19 billion. The government plans to increase the issuance of domestic debt to reduce exchange rate risks, improve foreign exchange liquidity, and diversify financing sources away from external debt. However, excessive reliance on domestic financing risks further increasing banks' sovereign exposure and crowding out private sector credit.

The economy remains dependent on oil. Oil and gas accounted for 95 percent of all exports in 2024, while oil-related revenues made up two-thirds of total government revenues. Limited economic diversification and dependence on volatile oil prices led to a 40 percent currency depreciation in 2023 and a rebound in inflation.

Angola's domestic private sector faces deep structural challenges that continue to constrain growth and transformation despite sustained policy efforts. The private

Table 1.1

Economic Growth to Remain Subdued

	2010–19 average	2020	2021	2022	2023	2024	2025	2026f
Population (millions)		33.5	34.5	35.6	36.7	37.9	39.2	40.6
GDP (US\$, billions)	127.5	66.2	83.0	139.2	113.1	119.6	141.7	152.4
Real GDP growth (%)	2.5	–4.0	2.1	4.2	1.3	5.0	3.1	2.3
PPP GDP per capita (constant 2021 international US\$)	10,294	8,960	8,862	8,950	8,788	8,901		
Investment (% of GDP)	27.7	19.8	16.2	14.5	12.4	10.6	12.5	
Real GDP growth (%)	2.5	–4.0	2.1	4.2	1.3	5.0	3.1	2.3
Inflation, period average (%)	16.1	22.3	25.8	21.4	13.6	28.2	20.2	12.9
Fiscal balance (% of GDP)	–0.2	–3.0	1.4	1.8	–2.5	–1.2	–4.1	–2.5
Public debt (% of GDP)	50.6	119.9	75.5	57.4	75.7	57.1	51.3	51.6
Current account balance (% of GDP)	3.2	1.3	10.1	8.5	3.7	5.3	0.4	2.2
Gross reserves (US\$, billions)	24.1	14.9	15.5	14.7	14.7	15.8	15.9	15.4
Total reserves (in months of imports)	8.0	11.8	9.9	6.2	7.5	8.3	7.3	7.1
FDI, net inflows (% of GDP)	–1.7	–2.8	–5.2	–4.7	–1.9	–0.9	+1.6	

Sources: World Bank Macro Poverty Outlook database (April 2026); World Development Indicators; International Monetary Fund World Economic Outlook (April 2026).

Note: f = forecast; FDI = foreign direct investment; GDP = gross domestic product; PPP = purchasing power parity.

sector landscape is dominated by micro, small, and medium enterprises (MSMEs) with relatively low production capabilities. Seventy-nine percent of all companies have fewer than five workers;⁷ they tend to be relatively young and operate mainly in low-productivity services and commerce. These MSMEs have limited access to capital, skills, and markets. Employment remains overwhelmingly informal: about 80 percent of employed Angolans work in informal jobs, rising to over 95 percent in rural areas.⁸ Self-employment dominates, but productivity remains low, and job creation is largely confined to subsistence activities.⁹

Angola's SOEs dominate strategic sectors, although reforms aim to reduce their dominance. The state is particularly active in service provision, including water and electricity, as well as in the strategically important oil and diamond sectors. The government retains full ownership of key entities like Sonangol, in oil and gas, and

Gesterra, in arable land management, while pursuing partial divestment to attract private capital. Sopir (Sociedade de Desenvolvimento de Perímetros Irrigados, S.A.) and Sodepac (Sociedade de Desenvolvimento do Polo Agro-Industrial de Capanda, S.A.), formerly structured as fully integrated agricultural and rural enterprises, were placed into dissolution proceedings in November 2018. While vertical integration can have advantages, allowing an SOE to buy from or sell directly to its own enterprises can adversely affect competition. The government has embarked on reforms to privatize SOEs under the Propriv program (Programa de Privatizações), improve regulation, and reposition the state as a facilitator of private enterprise, but progress has been slower than expected.

1.2 Financing the Private Sector

The banking sector remains underdeveloped. Financial inclusion is low, and less than half of the adult population has access to formal financial services, below the average for other lower-middle-income countries.¹⁰ The banking sector's total assets stood at 32 percent of GDP at the end of 2024, only half of the Sub-Saharan Africa average, while private loans were only 7.8 percent of GDP, one-third of the Sub-Saharan Africa average. Most of the 23 banks operating in Angola are foreign-owned, while three state-owned banks¹¹ control roughly 25 percent of the sector's assets. According to the 2024 World Bank Enterprise Surveys, only 6 percent of small firms and 9 percent of firms with more than 100 employees used bank loans. Most fixed asset purchases were financed from internal resources, with only 3 percent financed by banks and 5 percent by equity.¹²

Constraints on credit growth include cumbersome collateral registration, inefficient enforcement procedures, and an underdeveloped credit registry. In the latest World Bank Enterprise Surveys, over half of firms, 56 percent, identified access to finance as the main constraint to business operation. Volatile macroeconomic developments have forced banks to keep strict underwriting standards and high borrowing spreads on new loans. To reduce risks, banks hold a significant share of their assets in government debt, which crowds out lending to the private sector. Foreign-currency loans represented roughly 25 percent of all outstanding loans in 2024, up from 16 percent in 2023.

Domestic capital markets remain underdeveloped, making access to long-term financing difficult even for large firms. The national stock exchange was established in 2014, but only four firms are publicly listed, and total capitalization is less than 0.1 percent of Angola's GDP.¹³ The government plans to partially privatize several major companies by 2026, which could boost the number of listed companies.¹⁴ However, the privatization process has been slow and politically difficult.¹⁵ The exchange trades debt securities, with government debt accounting for 97 percent of all securities available on the market.

Table 1.2

Banking Sector Lags Peers

	Most recent	Angola Five-year average	Sub-Saharan Africa median (most recent)	LMICs median (most recent)	EMDEs median (most recent)
Domestic credit to the private sector (% of GDP)	7.4	8.4	15.8	25.6	33.9
Bank penetration (% of GDP)	6.5	7.6	15.8	23.6	31.8
Capital adequacy ratio (% of RWA)	23.8	22.3	19.2	18.4	18.9
NPLs (% of loans)	15.0	19.9	5.2	4.6	3.2
Provisioning rate for NPLs (%)	165.7	123.3	56.2	66.1	65.4
Foreign-currency loans (% of loans)	16.1	19.4	26.2	22.3	20.8
Government debt (% of assets)	41.6	34.3	16.2	19.0	11.9
Share of state-controlled banks (% of assets)	27.1	n/a	n/a	n/a	n/a
Share of foreign-owned banks (% of assets)	12.7	n/a	n/a	n/a	n/a

Sources: International Monetary Fund Financial Soundness Indicators; BMI Research.

Note: GDP = gross domestic product; EMDEs = emerging markets and developing economies; LMICs = lower-middle-income countries; NPLs = nonperforming loans. Comparator averages are calculated as a simple average of nonzero data. Most data refer to 2023, but some are from 2024 or from prior years.

Corporate bond issuance remains minimal and concentrated among a few large firms. Barriers include high interest rates, limited investor appetite, high issuance costs, and regulatory hurdles. A lack of credit ratings and limited corporate financial disclosure also constrain growth. The total stock exchange turnover in 2024 was only US\$7 billion, or 6 percent of GDP, with repo purchases representing almost half, treasury securities more than one-quarter, and private bonds accounting for less than 5 percent of the total.¹⁶

FDI inflows are primarily concentrated in the oil and natural gas sectors, which accounted for over 96 percent of inflows between 2005 and 2023. However, Angola experienced a steady FDI repatriation from 2018 to 2023, as low oil prices and deteriorating domestic infrastructure compelled international oil companies to lower their exposure to Angola. In a recent FDI Survey undertaken for this report, foreign investors listed high taxes, cited by 43 percent of surveyed firms; excessive regulation, cited by 38 percent; and difficult access to finance, cited by 28 percent, as the main challenges.¹⁷ In the same survey, 50 percent of investors in agriculture identified access to finance as a top operational

Table 1.3

Despite Recent Reforms, Domestic Capital Markets Are Still Nascent

	Angola		Sub-Saharan Africa	LMICs
	Most recent	Five-year average		
Public bond market				
Outstanding bonds by the public sector (% of GDP)	23	39.5	n/a	n/a
Corporate bond market				
Outstanding corporate bonds by the private sector (% of GDP)	0.0	0.0	4.1	1.4
No. of listed corporate bonds	1	1	1.5	5
Public equity market				
Market capitalization (% of GDP)	1.8	1.0	20.1	13.8
No. of listed firms	4	2	19	20
Share turnover velocity (%)	1	<1	1.2	3.1

Sources: World Exchanges; LSEG Refinitiv database; BMI Research.

Note: GDP = gross domestic product; LMICs = lower-middle-income countries. Comparator averages are calculated as a simple average of nonzero data. The Sub-Saharan Africa average excludes South Africa.

challenge. The outlook for foreign investment has been improving, with 85 percent of firms surveyed firms planning to increase investment in the next three years. This is reflected in several major investors announcing new projects in Angola's offshore oil sector.

1.3

Investment and Business Climate

In the 2024 World Bank Enterprise Surveys, more than half of firms in manufacturing, retail and services considered unaffordable and limited financing as their main concern, followed by the tax rate, unreliable power supply, and access to land (figure 1.2).¹⁸ Barriers to accessing land are considered a deterrent to investment in agriculture. Climate change has made drought more frequent and severe, impacting hydroelectricity generation, the country's major power source, and grain production, especially in drought-prone southern provinces.¹⁹

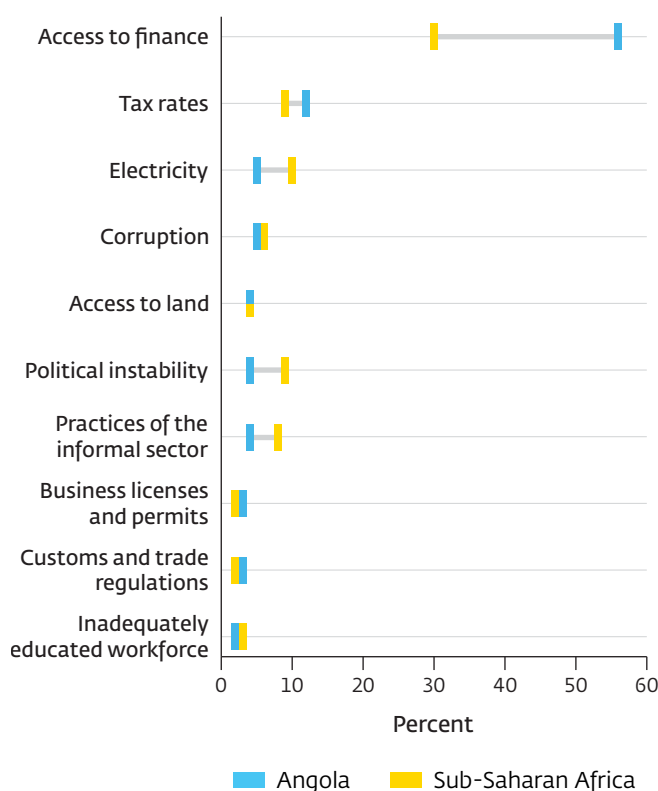
Angola's private sector development is constrained by weak institutional quality, limited policy predictability, and governance challenges. Angola ranks poorly across

several dimensions of governance: its government effectiveness percentile was only 14.6th percentile in 2023, compared to 43.0 for its structural peers, reflecting weaknesses in public service quality and policy implementation (figure 1.3).²⁰ Similarly, regulatory quality and rule of law scores are low, while corruption perceptions remain high, placing Angola in the bottom quartile compared to its structural peers. These institutional weaknesses hinder market efficiency and private investment.²¹

Figure 1.2

Access to Finance, Taxes, Electricity, and Access to Land Are Major Business Obstacles

Share of firms that identify each factor as the main business constraint, 2024

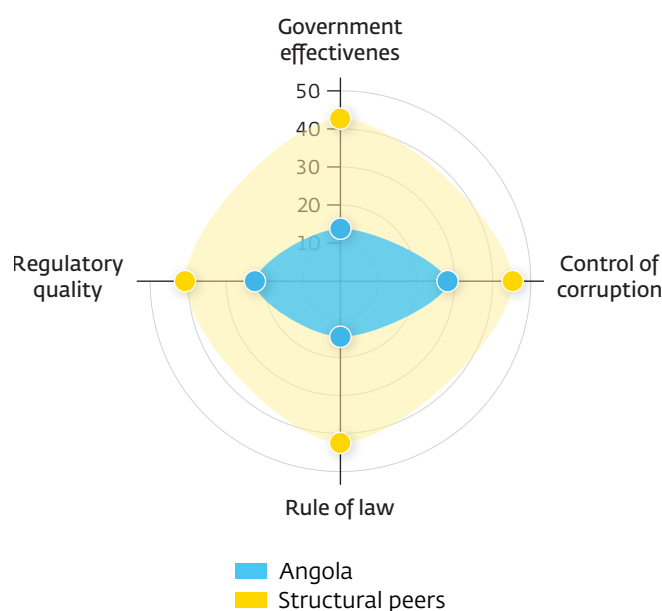


Source: World Bank Enterprise Surveys.

Figure 1.3

Angola Trails Its Peers in Key Aspects of Governance

Worldwide Governance Indicators, Angola vs. structural peers, 2023



Source: Kaufmann and Kraay (2023).

Note: For each governance dimension, the length of the axis reflects the percentile rank of a country relative to all other countries in the world. Government effectiveness measures the quality of public services, civil service and degree of its independence from political pressures, policy formulation and implementation, and the credibility of the government's commitment to such policies. Regulatory quality measures the government's ability to formulate and implement sound policies and regulations that permit and promote private sector development. Rule of law is the extent to which agents have confidence in and abide by the rules of society, as well as the quality of contract enforcement, property rights, the police, the courts, and the likelihood of crime and violence. Control of corruption refers to the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. Structural peers consist of Angola, Botswana, Tanzania, and Zimbabwe.

Angola's labor market is dominated by low-productivity activities. In 2023, about 56 percent of workers were in agriculture, 38 percent in services, and 6 percent in industry (table 1.4). This structure mirrors limited diversification: capital-intensive oil drives GDP but not job creation. Only 35 percent of the workforce held wage or salaried jobs in 2023, reinforcing stagnant productivity and earnings.

Table 1.4

Angola's Young Labor Force Faces High Unemployment and Persistent Skills Gaps

	Angola	Sub-Saharan Africa	UMICs
Labor force supply			
Population ages 15–64 (as % of total population) ^a	52.6	55.8	68.3
Labor force participation rate (% of population aged 15–64) ^b	76.6	71.3	69.9
Learning-adjusted years of school ^c	4.2	5.0	7.9
School enrollment, tertiary (% gross) ^d	10.0	9.0	64.0
Labor market conditions			
Unemployment, total (% of total labor force) ^b	14.5	5.9	5.7
Share of firms identifying an inadequately educated workforce as a major or very severe constraint (%) ^e	16.4	13.7	21.9
Employment by sector (% of total employment)			
Industry ^b	5.6	12.5	27.9
Agriculture ^b	56.2	49.0	20.4
Services ^b	38.2	38.5	51.7

Sources: Approach follows that used in the World Bank Group Growth and Jobs Reports.

Note: UMICs = upper-middle-income countries.

a. World Development Indicators.

b. International Labour Organization. Modeled figures for 2024.

c. Human Capital Index. Learning-adjusted years of school adjusts school years for how much students learn for each year they are in school using results from standardized tests.

d. UNESCO. All countries are the latest available, Angola from 2023.

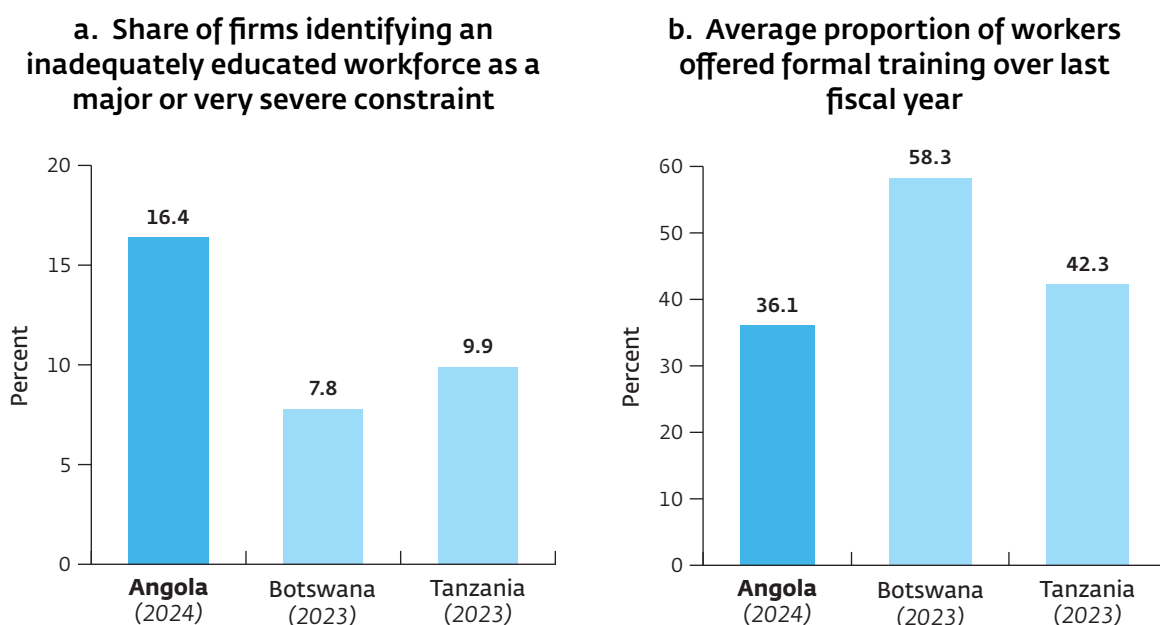
e. World Bank Enterprise Surveys. Latest available results, Angola from 2024.

Persistent skills gaps among Angola's young and growing labor force limit productivity and competitiveness, reducing the potential for diversification and discouraging private investment. The country's Human Capital Index score of 0.36 in 2020 is below those of regional peers such as Botswana, at 0.41, and Zimbabwe, at 0.46. This reflects lower average schooling, with only 44.5 percent completing lower secondary education, compared to 88.1 percent and 72.3 percent in Botswana and Zimbabwe, respectively, as well as lower test scores, at 325 versus 391 and 396 for Botswana and Zimbabwe, respectively.²² Mismatches persist between the skills taught by the education system and those demanded by nonoil sectors, particularly in technical, digital, and vocational fields.²³ Labor force participation is relatively high, at 76 percent in 2024, yet many youth remain in low-productivity or informal employment.²⁴ While 16 percent of firms identify an inadequately educated workforce as their single most severe obstacle, just 30 percent of firms report offering formal training, and only 36 percent of workers benefit from training (figure 1.4).²⁵ Nearly two-thirds of firms expanded their workforce over the past three years, but reliance on foreign nationals, employed by 85 percent of firms, underscores the structural shortage of skilled labor.²⁶

Figure 1.4

Investment in Worker Training by Private Firms Is Low

World Bank Enterprise Surveys, Angola vs. structural peers



Source: World Bank Enterprise Surveys.

*This indicator is computed using data from manufacturing firms only. Structural peer, Zimbabwe, is excluded because most recent data dates to 2016, limiting comparability.



2

Sector Selection

This Country Private Sector Diagnostic (CPSD) identifies three sectors of the economy in which concrete policy actions could generate commercially viable opportunities for private investors: poultry feed, chemicals, particularly olefins and fertilizers, and independent power transmission (IPT).

These sectors have the potential to contribute to growth, job creation, and broader development. They can also support economic diversification in Angola and enable the development of other sectors and activities across the country. In addition, these sectors could play an important role in generating and leveraging key infrastructure and projects in the Lobito Corridor. Sector selection was based on data analysis, internal consultations with World Bank Group experts, in-country consultations, including with private investors and entrepreneurs, and desk research.

CPSD sector selection is driven by three criteria:

- 1 The potential to attract private capital if constraints are mitigated through policy action.
- 2 Development impact.
- 3 The feasibility of removing key constraints.

Sector selection is not intended to be exhaustive or to imply that other sectors lack investment or growth potential. Entrepreneurs may identify further profitable opportunities in other sectors. The focus here is on sectors where an identified constraint to private investment can feasibly be alleviated by public policy actions. The recommended actions are not necessarily sufficient on their own. Rather, these actions are highlighted as concrete and observable steps that would represent meaningful progress along the results chain from action to impact, and that can be taken in the next few years. The ultimate impacts on investment and job creation would be enhanced by complementary measures and capacity building, also noted in the body of this report, that extend beyond such a timeframe.

The Angola CPSD sector selection involved a comprehensive process combining quantitative and qualitative analysis and consultations. First, sectors were evaluated using a structured quantitative approach. This involved assessing private investment potential using a range of indicators including revealed comparative advantage, export gaps, global demand growth, and profitability indicators. The second stage of the process evaluated the potential developmental impact using variables such as job multipliers, value-added multipliers, and product complexity. Heatmaps were used to rank sectors for further analysis.

Poultry feed was selected based on Angola's cost competitiveness for soybean production, the rising domestic and regional demand for affordable animal protein, particularly poultry, and the sector's positive contribution to job creation, food security, and economic diversification. Local feed production can reduce and stabilize costs and support the growth of the poultry industry. Recent large-scale investments signal growing interest in expanding local grain processing capacity. The sector is leveraging Angola's vast arable land and water resources, competitive energy costs, and government initiatives to boost grain output. Current challenges include low grain yields, infrastructure gaps, and inadequate policies to support large-scale commercial agribusiness. By addressing constraints through targeted, high impact reforms, Angola can build an efficient and competitive domestic poultry-feed industry, helping to create much needed jobs and improve trade balances, while contributing to economic diversification and food security.

Olefins and fertilizers were chosen as a focus because Angola's chemicals industry—though underdeveloped—offers significant untapped investment potential, especially in higher-value-added petroleum products. The country's oil and gas resources provide a strong foundation for developing the chemicals sector, with olefins (such as ethylene and propylene) serving as high-value chemicals essential for manufacturing, agriculture, and construction. Global trends show rising demand for chemicals, and Angola's government is actively promoting private sector involvement and infrastructure development to support first- and second-generation chemical plants. Olefins and gas-based fertilizers production can catalyze broader economic transformation, supporting downstream industries like long-use plastics, agrochemicals, and packaging, and in so doing can generate substantial direct and indirect employment. The sector's selection is further justified by its potential to leverage Angola's natural gas reserves, reduce reliance on imports, and foster innovation and sustainability in manufacturing, as well as boost agricultural productivity.

Private sector IPT projects can play a critical role in the development of Angola's electricity transmission network, for both domestic and regional use, while reducing capital demand on the state. Angola's growing industrial base and high urbanization rates are increasing demand for more reliable and accessible electricity. While the country has significantly increased its generation capacity in recent years, excess capacity is not being used due to deficiencies in the transmission infrastructure. Expanding electricity access is a key government priority, as it underpins efforts to diversify the economy, support industrialization, and meet the needs of a rapidly growing population. Improving the regulatory framework is essential to unlock private investment in this sector, and to improving access to reliable, affordable, and sustainable energy for all Angolans. IPT projects can be critical in removing electricity access gaps in key regions to national development like the Lobito Corridor.

Table 2.1

Sector Selection with Development Impact Potential

Sectors	Relevance and development impact potential
Poultry feed: maize and soybeans	• Addresses growing domestic demand for animal protein and strengthens food security. • Diversifies the economy beyond extractives. • Creates significant employment opportunities.
Chemicals: olefins	• Adds value to Angola's natural resources. • Captures strong sector growth potential (six-fold expansion by 2060). • Upgrades domestic manufacturing capabilities.
Independent power transmission	• Monetizes excess generation capacity, including through regional exports. • Improves access to electricity. • Reduces government expenditures in line with Angola's fiscal consolidation objectives.

3

Poultry Feed: Maize and Soybeans

AT A GLANCE

- Angola's poultry-feed value chain is supported by the cost competitiveness of local soybean production and the imminent launch of a major industrial soybean extruder, which will increase the supply of high-quality feed ingredients. A 50 percent improvement in maize and soybean yields could reduce poultry-feed prices by 15–24 percent and increase poultry profitability by nearly 50 percent.
- Constraints to expanding local poultry production include high costs and volatile supply of imported feed, shallow local grain supply for feed mills (due to dependency on smallholder production and deficient aggregation capacity), and limited technology uptake such as improved seeds and irrigation, hampering grain productivity.
- To unlock this opportunity, the government should implement reforms to (1) increase grain productivity through improved seeds; (2) harmonize grain quality standards to formalize the market, improve pricing mechanisms, and attract capital; (3) establish a robust legal framework for outgrower schemes; and (4) identify strategic agro-industrial investment areas with prescreened land availability to increase large-scale, commercial production of grains.
- Implementing these recommendations could attract private investment of over US\$600 million and create up to 20,000 jobs in the medium term.

Sector Context and Investment Potential

Angola is endowed with substantial agricultural resources, yet its agribusiness sector remains underdeveloped after decades of conflict and high oil dependence.

The country has an estimated 35 million hectares of arable land, of which only about 17 percent is currently cultivated. The process of identifying available land and formalizing land titles is often cumbersome and subject to considerable risks, discouraging private investment in large-scale commercial farming.²⁷ In addition, low technology adoption, poor agronomic practices, weak infrastructure, and limited access to finance hamper overall sector productivity. More than half of the country's food, including grains and livestock products, is imported at a cost of around US\$2.1 billion in 2024.²⁸ Angola currently imports about 84 percent of domestic poultry product consumption—an estimated US\$400–500 million annually—which weighs heavily on Angola's balance of payments.

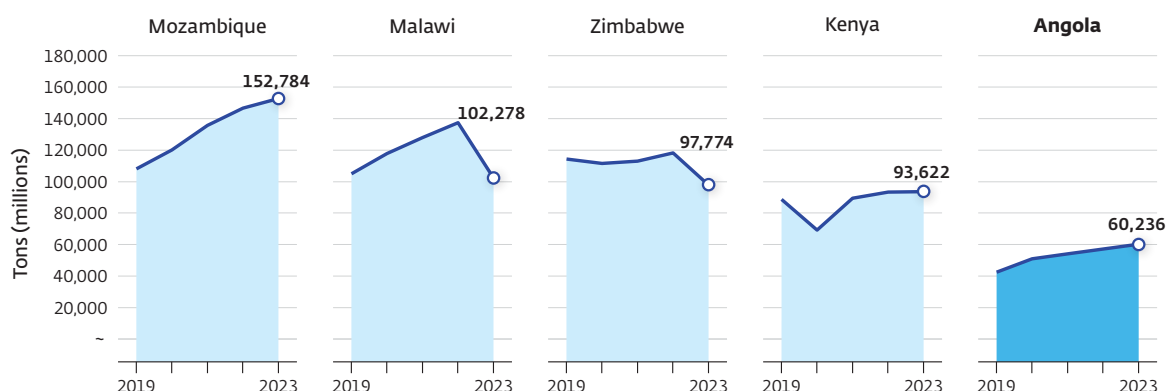
Despite the challenges, there are promising investment opportunities across the grains and animal protein value chain, driven by a steady increase in domestic demand. Between 2020 and 2024, Angola experienced significant cumulative growth in the consumption of eggs (12.7 percent), poultry (18.4 percent), pork (24.7 percent), and dairy products (17.7 percent), equivalent to compound annual growth rates of approximately 3.0 percent, 4.3 percent, 5.7 percent, and 4.2 percent, respectively. Poultry is the most consumed animal protein in the country and has seen a surge in demand, as it is among the most affordable meats. As household incomes improve and urbanization accelerates, demand for affordable animal protein such as poultry is expected to increase, which will in turn increase the need for poultry feed.

Domestic poultry meat production reached about 60,000 tons in 2024, significantly below comparator countries in the region (figure 2.1). Angola's relatively low output is not driven by lack of demand, but by a structural incentive problem: years of oil-driven import dependency made it cheaper and easier to import frozen poultry than to invest in developing the full domestic value chain—from feed crops and hatcheries to cold-chain logistics and processing. This import orientation constrained economies of scale, discouraged private investment, and limited the emergence of integrated producers.

The regional comparison shows, however, that poultry import dependence is a policy choice. Mozambique and Malawi expanded domestic supply when governments actively aligned policy, investment, and incentives behind local production rather than cheap imports. Angola is now making a similar decision—replacing the focus on short-term cost minimization through imports with a shift toward realization of long-term national interests such as jobs, rural development, and domestic food security. As figure 3.1 shows, countries such as Mozambique and Malawi that put in place appropriate policies for

Figure 3.1

Annual Poultry Meat Production, by Country



Source: FAOSTAT.

Box 3.1

Lessons from Mozambique: Developing the Domestic Poultry Value Chain

The successful expansion of domestic poultry production in Mozambique presents relevant lessons for Angola. Mozambique's poultry sector illustrates how coordinated policy reforms can rapidly scale domestic production. Following the launch of a comprehensive industry development program in 2005, domestic broiler output grew from approximately 40,000 tons to over 135,000 tons by 2024, driven by three key interventions: (1) establishment of a national poultry association and implementation of import quality standards to level the playing field with dumped frozen imports, (2) outgrower programs linking smallholder poultry and soybean farmers to commercial aggregators and processors, and (3) investment

incentives for integrated producers in feed milling, hatcheries, and slaughter facilities. The share of poultry consumption met by imports declined from approximately two-thirds in 2005 to less than one-fifth by 2025. The Mozambican experience suggests that coordinated action across the grain, feed, and poultry segments—anchored by a strong industry association and supported by phased import discipline—can produce measurable results within five to seven years.

For Angola, the lesson is that poultry competitiveness hinges less on protecting the market and more on unlocking investment and integration, so that domestic producers can reach scale and compete on cost and consistency.

attracting investments in feed production and value-chain integration reduced import reliance and scaled domestic supply within a few years.

The investment case for domestic grain production rests not on blanket import substitution but on a selective cost advantage. Angola can produce maize and soybeans at competitive cost for domestic feed use, while continuing to import specialized inputs—such as amino acids, vitamin premixes, and breeding stock—that are essential to feed quality and poultry productivity and for which no near-term domestic alternative exists. Maintaining open, low-friction access to these complementary imports is as important to the sector’s competitiveness as expanding local grain supply.

The Angolan government is actively promoting investments to boost grain and animal protein production. A featured element of the Angola’s National Development Plan is agricultural development to diversify the economy and to build domestic food production capacity that will decrease the country’s dependence on imported food. This includes increasing maize and soybean production capacity to meet domestic demand (for human and animal feed) through a range of public and private initiatives. The Plano Nacional de Fomento Para a Produção de Grãos (National Grain Plan) seeks to invigorate domestic production of essential grains, including maize, wheat, soy, and rice, benefiting over 200,000 farmers, while the PLANAPÉCUÁRIA (Plano Nacional de Fomento e de Desenvolvimento da Pecuária; National Plan for the Promotion and Development of Livestock) aims to achieve food self-sufficiency by boosting domestic production of meat, milk, eggs, and poultry. These initiatives underscore the government’s commitment to increase farmers’ incomes, expand the sector’s contribution to gross domestic product, reduce reliance on imports by strengthening the animal protein production value chain, and enhance Angola’s capacity to meet domestic consumption needs while creating export potential. By developing local production and processing of grains, there is potential to create a cohesive system where increased domestic cereal production supports growth in the poultry sector, leading to more integrated and efficient value chains.

In a conservative scenario of increasing domestic poultry production by 3 percent per year over the medium term, an estimated total of US\$602 million in investment opportunities could be enabled. This estimate assumes an increase from 15 percent to 30 percent of local poultry production that is consumed domestically. Under this scenario, nearly 20,000 new direct jobs could be created along the value chain, namely 5,000 jobs in primary production of grains, 2,000 jobs in feed mills, and 13,000 jobs in poultry production. This estimate is based on unit-cost benchmarks from comparable investments in the region, including per-hectare development costs for commercial grain farming, feed mill construction costs per ton of installed capacity, and poultry facility costs per bird of annual output (see appendix A for detailed assumptions and methodology).²⁹

Growth in Angola’s poultry sector will drive increased demand for feed production, as poultry accounts for nearly 85 percent of the country’s total animal feed consumption. Early-stage investments are underway, with promising prospects for boosting feed

demand. For example, a large integrated project covering feed production, fattening, and outgrower schemes includes a genetic bank of broiler breeders³⁰ that will increase the supply of day-old chicks by 1 million per month. Additionally, another major local poultry producer recently imported 35,000 breeder hens in February 2025, which are expected to place around 500,000 day-old chicks on the market each month. Together, these two projects are estimated to increase feed consumption in the broiler segment by approximately 22.5 percent per year, or about 45,000 tons, representing an additional US\$22.6 million in annual demand for domestic feed, based on current total broiler feed consumption of approximately 200,000 tons per year.

A key constraint limiting domestic production of poultry products is the high cost and scarcity of quality feed, which represents around 60–75 percent of total poultry production costs. Feed is the highest cost component in the intensive production of layer hens³¹ and broiler chickens. The final feed price at the factory is directly correlated with the cost of raw materials, especially maize and soybeans.

High price sensitivity among producers—especially smaller operations—and the absence of quality differentiation and adequate labeling requirements between feed options leads to price becoming the main determinant in purchasing decisions. Smaller poultry producers end up using homemade feed of inadequate quality. The absence of specific quality and labeling standards for poultry feed discourages local feed mills from investing in quality control of raw materials and final products, developing new formulations, innovative presentations, or market segmentation for niche markets.

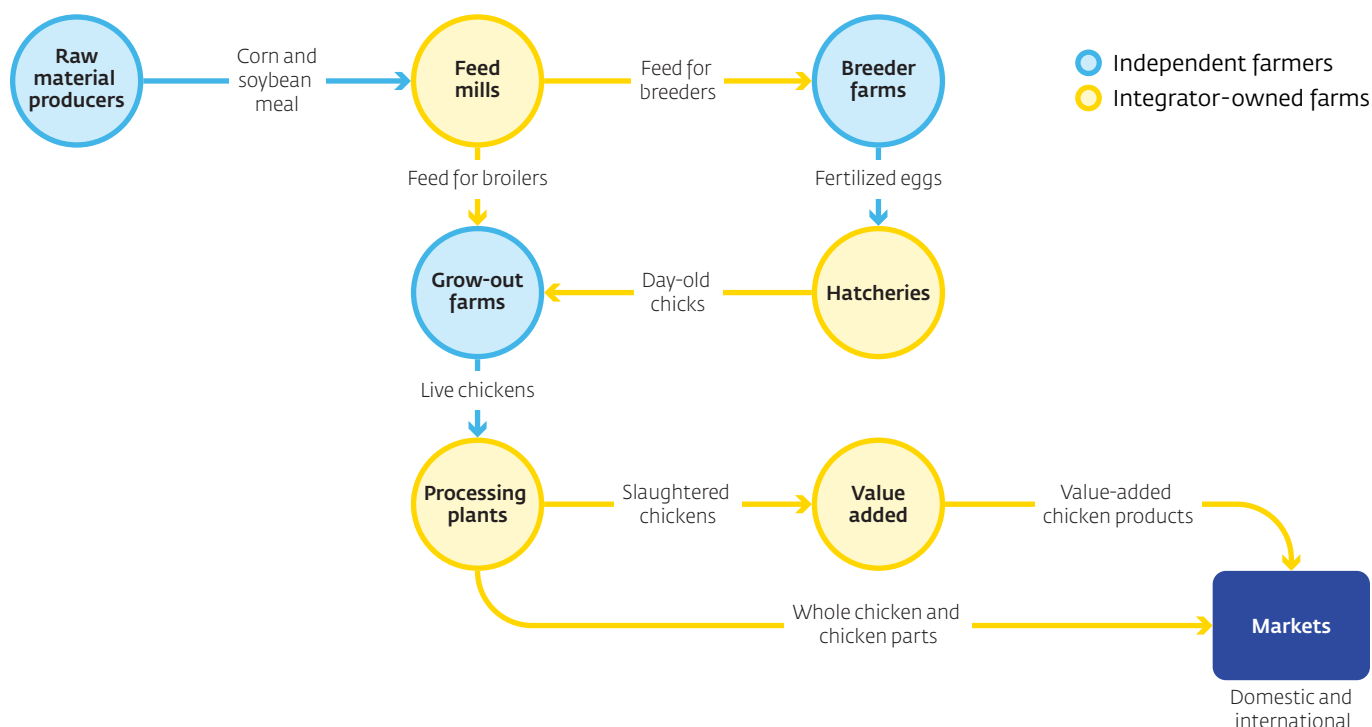
The lack of reliable and high-quality feed supply is a contributing factor to the low productivity of the domestic poultry sector. Local feed supply shows variable quality, lack of standardization, and inadequate labeling information. In addition, the absence of robust regulations for feed production and marketing, as well as the limited availability of technical assistance to assess the feed conversion ratio,³² impede efficiency comparisons across different feed formulations being offered in the Angolan market.

Angola's poultry-feed industry consists of large vertically integrated firms, typically with associated poultry processing operations, and smaller, dedicated feed manufacturing units. Larger, integrated poultry operations typically have their own feed production units and consume most of their internally produced feed. Dedicated local feed producers mainly serve small- and medium-size broiler chicken farms, pig breeding, and egg production units, predominantly located in peri-urban areas of provincial capitals, aligning strategically with their production locations.

The local feed industry is at a nascent stage of development and is hampered by insufficient domestic grain production. Maize and soybeans are the cornerstone of feed

Figure 3.2

Vertical and Horizontal Linkages in the Poultry Value Chain



Source: Adapted from Unveren and Luckstead (2020).

rations, providing energy and protein, respectively. Modern broiler and layer operations require a consistent supply of compound feed, mainly maize, soybean meal, and vitamins and minerals (figure 3.2), but Angola's feed manufacturing capacity is currently constrained by the lack of local availability of these inputs. As a result, poultry producers, especially larger commercial operations, either rely on imported feed or its ingredients, or they operate below capacity due to the unreliable domestic supply of grains. Feed imports are vulnerable to foreign-exchange availability and shocks, high logistics costs, and supply disruptions.

Angola has the necessary endowments to competitively produce the main ingredients for the feed industry, namely soybeans and maize. However, doing so will require a combination of policy reforms and operational improvements that can help boost yields and increase the local production of these grains. Private investment could profitably expand large-scale grain cultivation and processing in high-potential regions, leveraging Angola's fertile land to supply a growing feed industry. Angola's suitable agroclimatic conditions, ample arable land and water, and competitive energy costs³³ present a compelling business case for investment in primary production and processing of grains for poultry feed.

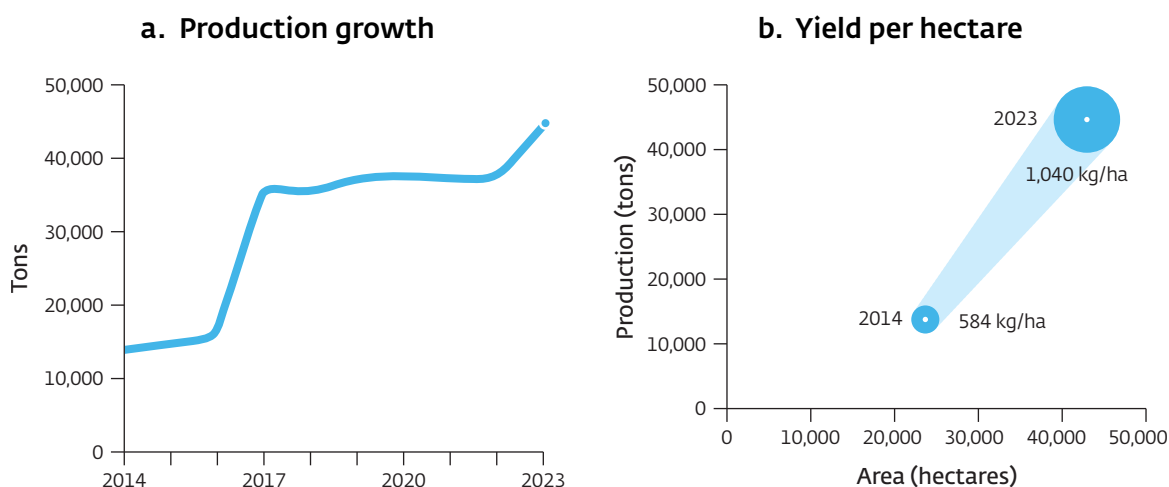
Increased domestic availability of cost-competitive inputs to the poultry-feed industry, such as soybean cake,³⁴ has the potential to lower production costs and help boost demand for higher quality feed. The imminent launch of a large-scale chemical soybean extruder in Benguela Province will significantly boost soybean demand in Angola. With an annual processing capacity of over 1.2 million tons and the ability to process 4,000 tons of soybeans per day, this facility could process the entire current national soybean production in just ten days, creating the conditions for a local surplus production of soybean cake.

The increased supply that will be generated by this large-scale chemical soybean extruder in Benguela Province is expected to further stimulate local soybean production. In addition, the extruder is projected to supply not only oil but also significant quantities of soybean meal to the market—close to 1 million tons annually—produced from soybeans processed following international standards. The surplus in soybean cake is expected to lower local production costs of poultry feed, while improving the nutritional quality of formulations, thereby enabling a more competitive domestic poultry value chain. Furthermore, excess soybean cake production which is not absorbed by the local industry can be exported, generating additional foreign-exchange revenues.

While soybean production is still nascent, it has experienced average annual growth rate of nearly 14 percent in recent years. Total production increased from 13,700 tons in 2014 to 44,600 tons in 2023, while productivity per hectare nearly doubled, rising from 584 kilograms (kg) in 2014 to 1,040 kg in 2023, with 59 percent of the national supply coming from large farms (figure 3.3).

Figure 3.3

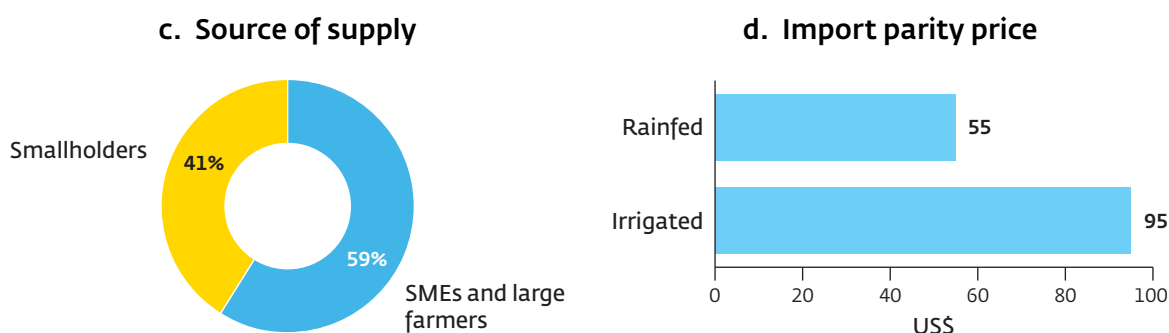
Angola's Soybean Production and Yields Trending Higher



(Figure continues next page)

Figure 3.3

Angola's Soybean Production and Yields Trending Higher (continued)



Soybean productivity per hectare remains low but has potential to achieve yield levels similar to those of regional peer countries. In 2023, Angola's soybean yields reached 1,040 kg per hectare (ha), compared with 1,260 kg per ha in Zambia, 1,373 kg per ha in Malawi, 1,625 kg per ha in Mozambique, and 1,840 kg per ha in Zimbabwe (figure 3.4). Peer countries also produced significantly larger volumes, ranging from about 70,000 tons in Zimbabwe to about 760,000 tons in Zambia—over 17 times Angola's production. However, Angola's soybean production costs compare favorably with international benchmarks due to its lower fertilizer requirements. This indicates strong potential to increase commercially viable domestic production to meet growing demand from the feed extrusion industry.

In Angola, soybean yield and cost are the starting levers of the entire protein value chain's profitability. A 20 percent drop in soybean cost represents 10 percent lower feed prices and 15–30 percent higher poultry margins. Therefore, supporting upstream soybean efficiency and midstream crushing and feed milling investment is the single most effective strategy to unlock competitiveness and private capital in the poultry and feed sectors.

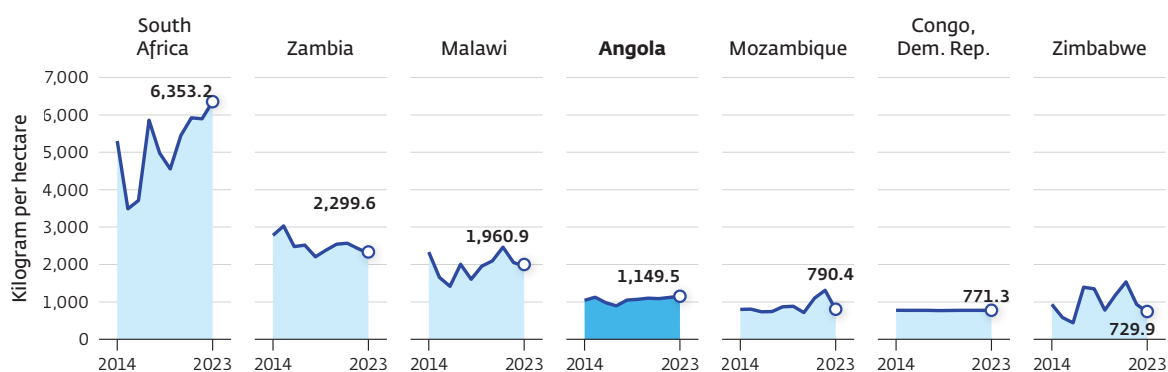
Over the past ten years, maize production in Angola has grown at an average annual rate of 7.4 percent, rising from 1.6 million tons in 2014 to 3.21 million tons in 2023. However, this increase did not translate into improved productive efficiency, but rather into an expansion of cultivated areas, which grew at an average annual rate of 6.2 percent, driven by population growth of 3 percent per year in rural areas. Consequently, maize yields have remained stagnant at around 1,150 kg per ha.

Low maize yields negatively affect the competitiveness of the animal protein value chain, driving up domestic prices. The core challenge lies in increasing maize productivity and reducing production costs through a combination of increased crop yields and cost

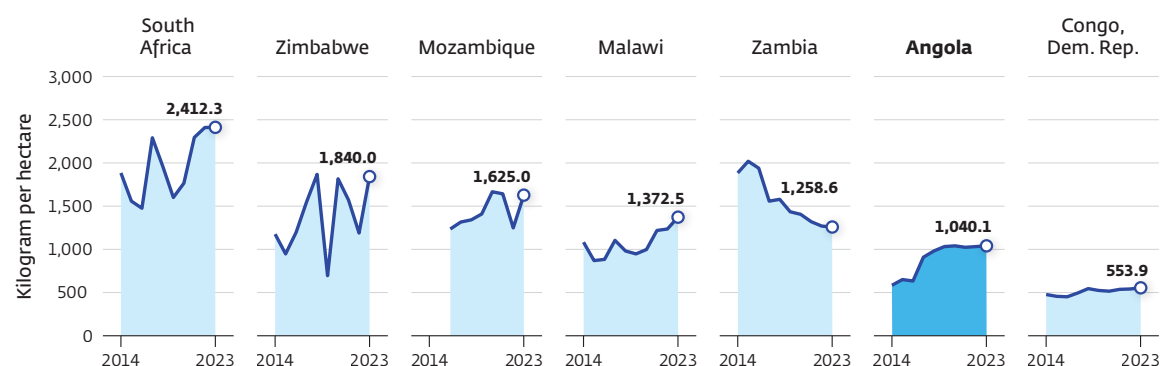
Figure 3.4

Angola's Maize and Soybean Yields Remain Well below Comparator Countries in the Region

a. Maize yield



b. Soybean yield



Source: FAOSTAT.

Note: ha = hectare; kg = kilogram.

rationalization. This includes (1) adoption of technologies such as genetically modified organism (GMO) seeds, (2) creation of a legal framework for plant variety protection aligned with the International Union for the Protection of New Varieties of Plants (UPOV) to help attract investment in modern seed breeding and technology, (3) optimization in the use of inputs through the introduction of improved fertilizer formulations and soil correction, and (4) implementation of conservation agronomic practices like cover crops and no-till farming. Improvements in overall domestic maize productivity would improve affordability for both human consumption and the animal feed industry.

Targeted reforms in the sector could increase maize and soybean yields on par with peer countries, representing a 50 percent yield improvement over the medium term.

Box 3.2

Feed Cost Transmission: From Farmgate Prices to Poultry Margins

The transmission from farmgate grain prices to final feed prices is moderated by three factors: (1) feed mill processing costs, estimated at US\$45 per ton, are fixed regardless of grain prices; (2) imported microingredients, including vitamins, minerals, and amino acids, account for about 20 percent of the ration and are unaffected by local yields; and (3) the feed mill margin is applied on top of total costs. As a result, a 33 percent reduction in farmgate grain costs, resulting from a 50 percent yield improvement, translates into an estimated 24 percent reduction in the feed price paid by poultry producers, from approximately US\$645 per ton to US\$490 per ton.

Since feed represents approximately 68 percent of total broiler production costs, and nonfeed costs, including chicks, labor, housing, and veterinary services, remain constant, this feed price reduction lowers per-bird production costs by approximately 16 percent and increases gross margins per bird by an estimated 48 percent (see appendix A for underlying assumptions). At current yields, domestically produced feed costs approximately 27 percent more than import-parity feed. A yield improvement of at least 45 percent is required for domestic grain-based feed to undercut import prices—making this threshold a key tipping point for sustained private investment in the domestic grain-to-feed value chain.

This could reduce domestic feed prices by about 20 percent and improve domestic poultry producers' margins by almost 50 percent. The projection is based on reforms to improve access to critical inputs, including seed quality, fertilizer access, and irrigation efficiency; optimize land availability for commercial agriculture; and scale up integration between smallholder producers and commercial aggregators and off-takers.

Such productivity gains could significantly reduce domestic feed prices, given the direct cost transmission from raw materials, which make up around 85 percent of total feed cost. Since feed represents between 60–75 percent of total poultry production costs, lower feed prices would reduce live-bird production costs and improve gross margins for poultry producers. Integrated feed millers would capture an even greater profitability uptick due to higher capacity utilization and lower dependency on imported inputs.

Large-scale agro-industry operators report that the grain supply from domestic primary production is insufficient and too fragmented to guarantee continuous operations. They face challenges in grain aggregation, high last-mile logistics costs, heterogeneity in grain standards, and obstacles to formalizing commercial transactions with family farmers.

The development of the Lobito Corridor presents a transformative opportunity to address some of the most binding logistics constraints facing Angola's grain-to-feed value chain. The corridor's rail and road infrastructure connects the agricultural heartland of Huambo and Bié provinces—where much of Angola's maize and soybean production is concentrated—to the port of Lobito and, eastward, to markets in the Democratic Republic of Congo and Zambia. Ongoing investments, including a planned national network of grain silos along the corridor, are designed to reduce postharvest losses, lower aggregation, and transport costs, and improve the efficiency of moving grain from farmgate to feed mill. These improvements could meaningfully narrow the cost gap between domestically produced and imported feed ingredients—a critical threshold that the sensitivity analysis in this chapter identifies as the tipping point for private investment in domestic grain production and processing.

More broadly, the poultry-feed value chain should be understood within a regional rather than purely domestic frame. The African Continental Free Trade Area and the development of the Lobito Corridor open the prospect of subregional value chains in which Angola supplies grain and processed feed ingredients to deficit markets in the Democratic Republic of Congo and Zambia, while sourcing inputs—including fertilizers, seed technology, and feed additives—from regional and international suppliers through the same logistics infrastructure. This two-way trade logic, rather than a closed import-substitution model, offers a more sustainable and commercially attractive foundation for private investment along the corridor.

Increasing the productivity of smallholders is another key factor for expanding local grain supply, particularly maize. Smallholders account for over 80 percent of agricultural production and 92 percent of cultivated land. Smallholder maize production is concentrated in central provinces like Huambo, Bié, Malanje, and Cuanza Sul. Traditional methods predominate smallholder production: mechanization is used by only 6 percent of smallholders, chemical fertilizers by 10 percent, pesticides by 5 percent, and irrigation by 14 percent.

Outgrower schemes and anchor farm models can serve as effective strategies for sourcing grain for the feed value chain, and become an alternative to inefficient, informal grain traders. The current market structure of maize and soybean production is characterized by many small-scale farmers and a few emerging integrated producers, with weak linkages between them. This fragmentation makes it hard to achieve economies of scale in grain aggregation and feed production.

There are now some examples of outgrower models in Angola operating under contract farming arrangements. However, the lack of an appropriate legal framework hampers opportunities to scale up. Current outgrower schemes include barter operations

with both smallholder farmers and large-scale farms, coupled with the provision of technical assistance. However, key challenges—particularly for maize—include the difficulty of securing farmer loyalty in a context of price speculation, where contracts cannot be indexed to a fixed price in advance. Moreover, the lack of a robust legal framework to protect against contract breaches by large-scale farms poses a significant obstacle to the effectiveness of this grain origination model in Angola.

Recognizing the importance and complexity of contract farming arrangements, some African countries, including Ethiopia, Kenya, and Zambia, have introduced specific legislation for contract farming. Such legislation typically aims to regulate the

Box 3.3

Integrating Smallholders through Outgrower Schemes: Lessons from Ethiopia

Ethiopia's Agricultural Production Contract Proclamation No. 1289/2023, enacted in July 2023, offers an interesting example for Angola. It establishes a legal framework for contract farming agreements between agricultural producers and contractors. The proclamation aims to regulate the production and sale of various agricultural products by improving quality, efficiency, and market linkages, providing a comprehensive legal structure where none existed before. It covers different types of contracts and aims to protect both farmers and buyers within the legal arrangement.

This type of outgrower business model is rapidly gaining prominence in Angola, emerging as a mutually beneficial strategy for smallholder farmers and investors. Its scale is already impressive: during the 2023/24 agricultural season, over 150,000 smallholders were integrated into this system through a single offtaker. This large operational base creates significant opportunities, especially if an animal feed mill acts as the primary offtaker for staple crops like maize and cash crops such as soybeans.

The Angolan iteration of the outgrower model, based on contract farming, is comprehensive. It involves (1) barter operations with both smallholders and large-scale farms; (2) the provision

of essential inputs, including improved seeds, fertilizers, agricultural tools, and equipment; (3) parametric-based yield insurance for risk mitigation; and (4) technical assistance.

Despite its comprehensive structure, the model faces several significant systemic challenges that must be addressed to attract further investment:

- *Production and market risks.* Offtakers are exposed to the risk of lower-than-expected production and side selling, particularly for maize. Side selling is driven by the difficulty of securing farmer loyalty in a volatile market where price speculation is common and contracts generally cannot be indexed to a fixed price months in advance.
- *Legal and systemic risks.* A major obstacle to effective grain origination is the lack of a robust legal framework for contract farming. This systemic failure leaves all parties—smallholders, large-scale farms, and offtakers—vulnerable to contract breaches, significantly hindering the reliability and scalability of the model.

As such, the legal framework established by Ethiopia can serve as a reference to help Angola overcome some of the challenges and risks arising from the expansion of outgrower models.

relationship between the sponsoring company and rural producers. Legislation can cover aspects including (1) registration and licensing requirements for participating companies; (2) clarity of contractual terms, including pricing and payment methods, essential quality norms and standards to ensure product consistency, terms for input supply and access to credit, details on technical assistance provided, and dispute-resolution mechanisms to address conflicts efficiently; (3) protective clauses that safeguard the interests of producers; and (4) a clear definition of the government's role in overseeing, mediating, and promoting best practices in these arrangements.

Expanding Angola's grains and animal feed sector offers one of the country's clearest pathways for rural development and economic diversification. Achieving expansion would hinge on raising yields to commercially viable levels, including through improved access to inputs and mechanization, and strengthening the regulatory environment for private investments in the sector. These gains would reduce feed costs, boost domestic poultry production, and position Angola to replace a growing share of imported animal protein with locally produced, higher-value food. The opportunity thus links targeted sector reforms directly to private investment, job creation, and improved food security.

3.2

Constraints and Recommendations

CONSTRAINT 1. Limited access to improved seeds, agricultural inputs, and technical assistance, as well as a lack of financial and digital inclusion, contributes to the low productivity of smallholder farmers, particularly in the maize subsector. Increasing on-farm yields is key to boosting domestic grain supply and improving the cost competitiveness of locally produced grains. From 2014 to 2023, Angolan maize yields ranged between 890 kg per ha and 1,150 kg per ha, less than half of Zambia's 2,300 kg per ha in 2023. The productivity gap reflects several compounding factors: Angola's fertilizer consumption stands at only 12.7 kg per ha compared with Zambia's 63.5 kg per ha; irrigated area comprises just 2 percent of total cultivated land, versus 4.1 percent in Zambia; and smallholder access to certified improved seed varieties and complementary agronomic advice remains limited.

RECOMMENDATION 1. Introduce a targeted, climate-smart input voucher program covering drought-tolerant and early-maturing maize seed and complementary fertilizer packages, delivered through accredited private agro-dealers who also serve as extension contact points for basic agronomic advisory services. Implementation would require (1) a ministerial decree establishing the program framework, (2) fast-tracking the approval of drought-tolerant and early-maturing seed varieties, (3) enabling paper and digital voucher redemption with simplified reimbursement procedures for

agro-dealers, and (4) formally accrediting agro-dealers as input redemption and advisory service points.

This market-based delivery model would strengthen private input distribution networks, improve climate resilience, and address the three most binding short-term constraints on smallholder maize productivity—seed technology, soil fertility, and agronomic knowledge—through a single instrument. While the productivity gap is multidimensional, the combination of improved seed and adequate fertilization offers the highest short-term yield response per dollar invested, particularly where drought-tolerant varieties reduce downside risk for risk-averse smallholders.

CONSTRAINT 2. The import ban on genetically modified (GM) seeds hampers access to high-yielding seed varieties. Decree No. 92/04 of December 2004 prohibits the production and importation of genetically engineered (GE) crops, including GM seeds. The recent establishment of the Comité de Sementes Geneticamente Modificadas (GM Seed Committee) in July 2025 indicates a move toward establishing a regulatory framework for GMOs, but no comprehensive biosafety system is yet in place.

RECOMMENDATION 2. Phase in the regulated importation and use of GM seeds, under the supervision of the GMO committee. Replace the blanket ban on GMOs with a phased, risk-based biosafety framework that begins by allowing controlled imports of GM maize and soy for feed and industrial use, followed by confined field trials of priority crops, such as drought-tolerant maize, and eventually limited commercial cultivation in selected zones once safeguards have been proven. This would require drafting and adopting a biosafety framework law aligned with the Cartagena Protocol on Biosafety and relevant regional good practices, including those of the Southern African Development Community (SADC) and Common Market for Eastern and Southern Africa. It would also require explicitly replacing the provisions of Decree No. 92/04, updating seed and sanitary and phytosanitary regulations, and adopting clear procedures for risk assessment, labeling, and monitoring. A gradual opening would reduce feed costs, strengthen poultry and agro-industrial competitiveness, and enhance climate resilience while maintaining strong environmental, consumer, and coexistence protections.

CONSTRAINT 3. The absence of a legal framework to protect intellectual property rights over plant varieties discourages private investment in productivity enhancements. Angola does not have a national legal framework for plant variety protection aligned with the standards of the UPOV. Modern seed companies that invest in developing high-yielding, climate-resilient, improved non-GMO, and hybrid varieties are reluctant to introduce their best products into markets where their intellectual property is unprotected. This discourages the entry of world-class seed technologies into Angola, directly impeding

improvements in agricultural productivity in the animal feed industry, which must rely on lower quality and less productive seeds.

RECOMMENDATION 3. Establish a modern plant variety protection legal framework, aligned with UPOV standards, to safeguard intellectual property rights over new plant varieties and attract private investment in high-yielding, climate-resilient seed technologies. Implementing a clear, enforceable plant variety protection law, supported by a national plant variety registry, streamlined variety release procedures, and enforcement mechanisms, would unlock access to world-class seed innovations and significantly raise agricultural competitiveness.³⁵

CONSTRAINT 4. The absence of sanctions for nonuse of productive land promotes speculative hoarding in high-potential agricultural regions served by enabling infrastructure, such as access roads and electricity, significantly deterring potential investors. This includes the Capanda Agro-Industrial Hub and the Mussende-Quilaba-Waku Kungo agricultural triangle, where a high number land rights have been allocated, often in large plots of more than 1,000 hectares, but remain underutilized.

RECOMMENDATION 4. Update the registry of land allocation permits in high-potential agricultural zones and enforce use-it-or-lose-it provisions. Establishing up-to-date and publicly available land registries, strengthening due diligence before concessions are granted, and linking land access to phased development milestones would curb speculation, unlock underutilized areas, and enhance the economic returns on existing public infrastructure. This would accelerate the reversion of idle large plots and prioritize reallocation to credible investors with viable business plans.

CONSTRAINT 5. Slow and rigid procedures hinder the acquisition of surface rights. Investors consistently describe Angola's land rights allocation process for commercial agriculture as slow, rigid, and opaque, with weak demarcation and unresolved overlaps between formal concessions and customary claims. This creates persistent tenure insecurity, community disputes, and exposure to risks such as bushfires, theft, and illegal land occupations. As a result, investors face high entry costs, long delays, and elevated risk premiums. Many investors end up relocating to remote areas with poor logistics—significantly undermining the attractiveness and viability of large-scale agricultural investment.

RECOMMENDATION 5A. Create a zone registry identifying strategic agro-industrial investment areas with prescreened land availability. The registry would identify strategic areas with prescreened, conflict-free land and provide investors with “land-readiness packages” containing verified cadastral maps, clear legal status, environmental preassessments, and basic infrastructure information. This approach would reduce due

diligence costs, lower entry risks, and make genuinely investment-ready land more visible and accessible to credible agribusiness investors.

RECOMMENDATION 5B. Harmonize the Land Law (Law No. 9/04) and Local Government Law (Law No. 27/19) with Presidential Decree No. 84/25 by aligning institutional roles, land-classification rules, and procedures for community consultation, demarcation, and concession approval with the requirements of the new single window for land rights concessions. This alignment would ensure that all steps—from recognizing customary claims to issuing surface rights—follow a single, coherent set of rules and be processed through the unified digital platform. Such harmonization would reduce contradictions between national and local authorities, strengthen legal certainty, and create a more predictable and investor-friendly land allocation system.

CONSTRAINT 6. Absence of specific legal instruments governing outgrower schemes. Outgrower schemes represent a crucial sourcing strategy for feed mills, achieving scale through aggregation of suppliers. Without a specific legal framework governing the contractual agreement between outgrowers and off-takers, the expansion of these types of schemes in Angola remains limited due to lack of legal clarity and dispute-resolution mechanisms, thereby increasing the risk perception by investors.

RECOMMENDATION 6. Introduce a standardized, legally recognized model contract for farmers and off-takers, supported by simple registration and enforcement procedures to scale outgrower schemes. Complementary measures, including contract-literacy training for smallholders, fast and low-cost dispute-resolution mechanisms, and digital contract registration, would increase transparency, reduce transaction risks, and create a more reliable environment for commercial outgrower expansion.

CONSTRAINT 7. The absence of formal grain standards³⁶ creates inconsistent quality, weak contract enforceability, and costly disputes across the domestic grain and feed market. This prevents feed mills from securing reliable volumes and planning forward purchases, raises transaction costs, and undermines the business case for investing in modern storage, drying, and milling capacity. As a result, the grains and poultry-feed value chain operates with high risk and low predictability, discouraging further private investment.

RECOMMENDATION 7. Adopt grain standards aligned with those of SADC. These should include harmonized moisture limits, impurity thresholds, mycotoxin tolerances, grading categories, and standardized sampling and weighing procedures. Such standards would strengthen the reliability of supply contracts for feed mills and other agro-industrial buyers, encourage farmers to upgrade production and storage practices, and enable the

use of grain as collateral under warehouse receipt systems, thereby improving market stability and unlocking new private investment across the grain value chain.

CONSTRAINT 8. The absence of mandatory feed quality standards and labeling requirements undermines market development and discourages investment in feed manufacturing. The lack of enforceable standards for nutrient content, labeling accuracy, and mycotoxin limits in compound animal feed allows low-quality products to undercut compliant producers, compresses margins for mills investing in quality control, and exposes poultry farmers to inconsistent feed performance.

RECOMMENDATION 8. Adopt mandatory compound feed quality standards, including minimum nutrient content specifications, mycotoxin limits, and labeling requirements for all commercially sold animal feed, enforced through periodic sampling and testing by the Instituto Nacional das Infra-Estruturas de Qualidade (National Institute for Quality Infrastructures). Phased implementation—beginning with voluntary registration and transitioning to mandatory compliance within 24 months—would allow the industry to adjust while raising the quality floor for all market participants.

Note: While this Country Private Sector Diagnostic (CPSD) focuses on enabling reforms to help unlock private investment, effective implementation of the recommendations, including those related to biosafety, sanitary and phytosanitary, and grain and feed standards, will require public investment in risk assessment capacity, laboratory infrastructure, monitoring systems, and extension services. These critical investments in government technical capacity and institutional strengthening fall outside the scope of this CPSD. However, they represent essential complementary interventions that should be addressed through dedicated public sector capacity building programs.

3.3 Impact

The implementation of the proposed reforms could significantly unlock the potential of Angola's poultry sector by helping increase maize and soybean yields by 50 percent, thereby putting Angola's yields on par with those of regional peer countries. This would help reduce domestic feed prices by up to 15–20 percent, which could improve the domestic margins of poultry producers by up to 40–50 percent. These reforms could help attract over US\$600 million in private investment in the medium term and generate up to 20,000 direct jobs across the poultry sector value chain (see appendix A).

Table 3.1

Policy Actions for Increasing Private Investments in Grains for the Poultry-Feed Sector

Constraint	Recommended actions
1. Low productivity of the maize subsector. Limited access to improved seeds, agricultural inputs, technical assistance, and financial and digital inclusion by smallholder farmers contribute to low productivity, especially in the maize subsector. This significantly hampers the availability and competitiveness of locally produced grains in Angola.	1a. Introduce a targeted, climate-smart input e-voucher program covering drought-tolerant, early-maturing maize seed and complementary fertilizer, delivered through accredited private agro-dealers who also provide basic agronomic advisory. Farmer copayment declines over time (e.g., three seasons) to build graduation pathway toward unsubsidized purchasing. 1b. Complement with regulatory reforms enabling input financing through warehouse-receipt systems and risk mitigation tools such as crop insurance. <i>Responsible government entities:</i> MINAGRIF, MINFIN, MINDCOM, SENSE, and IDA.
2. Restrictive policies on genetically modified (GM) organisms. Import ban of GM seeds hampers access to high-yielding seed varieties.	2a. Phase in the regulated importation and use of GM seeds, under the supervision of the Comité de Sementes Geneticamente Modificadas (GM Seed Committee; CSGM). 2b. Draft and adopt a biosafety framework law aligned with the Cartagena Protocol on Biosafety and regional good practices, including those of the Southern African Development Community (SADC) and Common Market for Eastern and Southern Africa. <i>Responsible government entities:</i> CSGM, SENSE, MINAGRIF, INAC, MINAMB, and IGCA.
3. Absence of a legal framework for plant variety protection in Angola. Intellectual property is unprotected, discouraging the entry of world-class seed technology, impeding improvements in agricultural productivity, and keeping animal feed industry dependent on lower quality and less productive seeds.	3. Prioritize the development and enactment of a national plant variety protection law consistent with the International Union for the Protection of New Varieties of Plants 1991 Act. This allows proven regional genetics to enter into the Angolan market faster. <i>Responsible government entities:</i> MINAGRIF, MINJUSDH, Instituto Angolano da Propriedade Industrial (Angolan Institute of Industrial Property), SENSE, Instituto de Investigação Agronómica (Institute for Agricultural Research).
4. Absence of sanctions for nonuse of productive land promote speculation of land rights. Areas with high agricultural potential that are partially served by infrastructure, such as access roads, electricity, and agro-dealers, are underutilized and subject to intense commercial speculation.	4. Update the registry of land allocation permits in high-potential agricultural zones and enforce use-it-or-lose-it provisions. <i>Responsible government entities:</i> MINAGRIF, IGCA, and MAT.

(Table continues next page)

Table 3.1

Policy Actions for Increasing Private Investments in Grains for the Poultry-Feed Sector (*continued*)

Constraint	Recommended actions
5. Slow and rigid process for obtaining surface rights. Land rights allocation process for commercial agriculture is slow, rigid, and opaque. Investors face high entry costs, long delays, and elevated risk premiums.	5a. Create a zone registry identifying strategic agro-industrial investment areas with prescreened land availability.
	5b. Harmonize the Land Law (Law No. 9/04) and Local Government Law (Law No. 27/19) with Presidential Decree No. 84/25, which establishes the single window for land rights concession. <i>Responsible government entities:</i> IGCA, MINAGRIF, and MAT.
6. Lack of specific legal instruments governing outgrower schemes. The expansion of these types of schemes in Angola remains limited due to lack of legal clarity and dispute-resolution mechanisms.	6. Introduce a standardized, legally recognized model contract for farmers and off-takers, supported by simple registration and enforcement procedures to scale outgrower schemes.
	<i>Responsible government entities:</i> MINAGRIF, MINJUSDH, MINDCOM, and IDA.
7. Lack of quality standards for grains. Angola's absence of formal grain standards creates inconsistent quality, weak contract enforceability, and costly disputes across the domestic grain and feed market.	7. Adopt grain standards harmonized with those of the SADC. This allows proven regional genetics to enter the Angolan market faster.
	<i>Responsible government entities:</i> MINAGRIF, MINDCOM, MINSA, and INIQ.
8. Absence of mandatory feed quality standards and labeling requirements. This absence undermines market development and discourages investment in feed manufacturing, allowing low-quality products to undercut compliant producers, compressing margins for mills investing in quality control, and exposing poultry farmers to inconsistent feed performance.	8. Adopt mandatory compound feed quality standards, including minimum nutrient content specifications, mycotoxin limits, and labeling requirements for all commercially sold animal feed, enforced through periodic sampling and testing by INIQ.
	<i>Responsible government entities:</i> MINAGRIF, MINDCOM, MINSA, and INIQ.

Note: IDA = Instituto de Desenvolvimento Agrário (Institute of Agrarian Development); IGCA = Instituto Geográfico e Cadastral de Angola (Geographic and Cadastral Institute of Angola); INAC = Instituto Nacional da Criança (National Institute of Children); INIQ = Instituto Nacional das Infra-Estruturas de Qualidade (National Institute for Quality Infrastructures); MAT = Ministério da Administração do Território (Ministry of Territorial Administration); MINAGRIF = Ministério da Agricultura e Florestas (Ministry of Agriculture and Forestry); MINAMB = Ministério do Ambiente (Ministry of the Environment); MINDCOM = Ministério da Indústria e Comércio (Ministry of Industry and Commerce); MINFIN = Ministério das Finanças (Ministry of Finance); MINJUSDH = Ministério da Justiça e dos Direitos Humanos (Ministry of Justice and Human Rights); MINSA = Ministério da Saúde (Ministry of Health); SENSE = Serviço Nacional de Sementes (National Seed Service).



4

Olefins and Fertilizers

AT A GLANCE

- Angola has abundant oil and natural gas resources but has limited refining capacity and an undeveloped petrochemicals industry. Global demand for petrochemicals is expanding at twice the rate of fuel demand, and West Africa's fertilizer demand is rising even faster. In Angola and Sub-Saharan Africa, fertilizer use remains far below Organisation for Economic Co-operation and Development (OECD) averages, underscoring the market potential for domestic fertilizer production.
- Investors face challenges related to feedstock reliability and pricing, limited infrastructure, regulatory rigidity, and skills gap. Domestic fertilizer demand remains low due to weak supply chains, access to finance for distribution channels and farmers, and farmer training gaps.
- Recommendations reforms include adopting a comprehensive legal framework, securing domestic gas feedstock through flaring elimination and transparent allocation, introducing formula-based gas pricing differentiated to promote value-added activity, easing financial and licensing barriers, establishing a dedicated chemicals industrial zone with enabling infrastructure and incentives, and adopting sustainability-linked standards to align with global requirements.
- These reforms could attract at least US\$3.6 billion in private investment and create approximately 42,600 direct and indirect jobs by 2036. Beyond employment, a domestic petrochemicals base would expand small and medium enterprises linkages and strengthen agro-industrial productivity.

Sector Context and Potential Opportunity

Angola is the second-largest exporter of hydrocarbons in Sub-Saharan Africa.

The country currently produces 55 million tons per annum (mtpa) of crude oil and 4.5 mtpa of liquefied natural gas. Angola has significant potential to derive greater value from its hydrocarbon endowments by moving up value chains that contribute toward economic diversification, job creation, and food security. Despite producing substantial volumes of crude oil and gas, Angola imports most of the refined fuels it uses and all the petrochemicals derivatives, which limits its ability to generate local added value.

The government recognizes the importance of maximizing its hydrocarbon assets, as outlined by the 2025 Natural Gas Master Plan.

The plan emphasizes the monetization of its estimated 5.8 trillion cubic feet of proven natural gas reserves,³⁷ including the development of a domestic petrochemicals industry to diversify the economy and create employment opportunities. The investment potential in Angola's petrochemicals industry is significant, given the vast availability of natural resources to produce feedstock, such as liquefied petroleum gases and naphtha. However, the industry remains nascent, with no dedicated institutional or policy framework in place. While the country's hydrocarbon base provides a solid foundation for downstream industrialization, no comprehensive petrochemicals law or regulatory body yet governs feedstock allocation, gas pricing, or industrial licensing. As such, the sector remains in an early formation stage, requiring coordinated interventions to establish a clear enabling environment.

Box 4.1

Angola's 2025 Natural Gas Master Plan

Angola's 25-year Natural Gas Master Plan (Plano Director de Gás; PDG), led by the Ministry of Mineral Resources, Oil and Gas (Ministério dos Recursos Minerais, Petróleo e Gás; MIREMPET), aims to develop the country's gas value chain, prioritizing industrial growth in petrochemicals and fertilizers to reduce imports, create jobs, and diversify the economy. The plan allocates up to 30 percent of gas production for domestic use, with 7–12 percent earmarked for petrochemical investments in Cabinda and Soyo. It emphasizes enhancing gas production, piping infrastructure, and a supportive legal framework to attract global investors.

Angola holds 5.8 trillion cubic feet in proven gas reserves and is investing US\$7 billion in national pipeline infrastructure. The PDG promotes anchor projects with incentives, long-term gas pricing of US\$3–5 per metric million British thermal units, and secure offtake arrangements. Fertilizer and plastics manufacturing are highlighted as priority sectors. Identified industrial zones in Soyo, Malembo, Fútila, and Benguela will be supplied with dedicated gas volumes. The PDG sets phased goals through 2050, focusing on infrastructure, legal certainty, and gas availability to catalyze in-country value creation.

Ongoing initiatives to attract private investments in refining capabilities and non-associated gas offer opportunities to produce feedstock for petrochemicals. Initiatives include concessions to expand refinery capacity by 360,000 million barrels per day (bpd) across three sites in the medium term, beyond the country's sole existing plant that currently has a capacity of 65,000 bpd. Currently, most gas associated with oil production (associated gas) is either reinjected or burned (flared). As a result, Angola captures limited downstream value from its gas resources, while flaring contributes to emissions and foregone industrial opportunities. The Angola Liquefied Natural Gas (ALNG) project—a consortium between the national oil company and oil operators—has played a central role in commercializing previously flared gas. In 2018, the government established the Nonassociated Gas Law which included further clarity on gas concessions, incentives, and rules on commercialization, and domestic supply obligations. It also granted gas ownership rights to oil companies that produce it to attract further investment. Initial progress has been made in availing part of this gas to develop local manufacturing of fertilizer and urea, while the rest of the gas components which include feedstock critical for petrochemicals are exported.

Although the recent adoption of reforms paves the way for the emerging petrochemicals industry, investor confidence constraints prevail. Recent reforms have enabled new projects to produce nonassociated gas—boosting the capacity of the ALNG project and improving feedstock availability for domestic industries. However, constraints remain, due largely to the absence of a transparent, formula-based gas pricing system. This lack of predictability in feedstock costs is a key barrier to the development of a competitive gas-based petrochemicals and fertilizer industry in Angola. Infrastructure gaps represent another binding constraint: large-scale petrochemical plants depend on access to serviced land, water, energy, transport links, and waste treatment facilities.

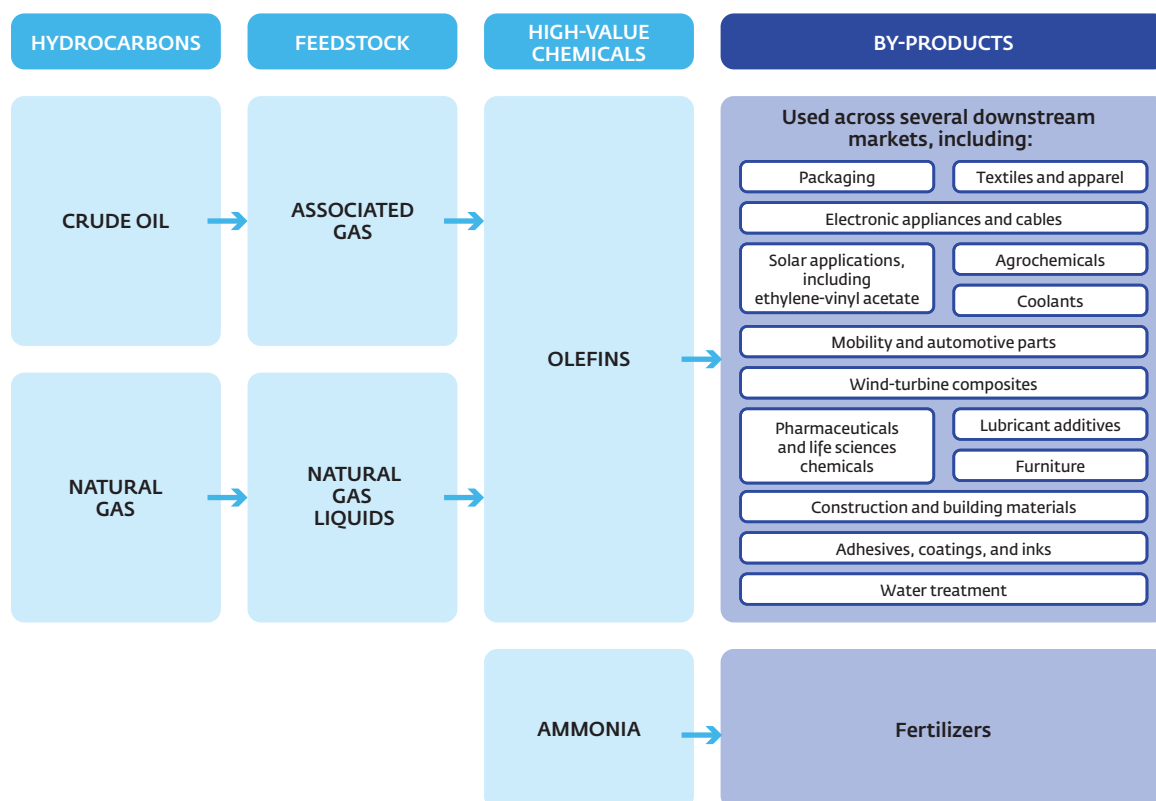
Identifying predeveloped industrial zones with sufficient gas connectivity would further incentivize private sector entry into the petrochemicals industry. Angola offers two strategically located sites that could potentially serve as single gas-to-chemicals industrial zone, Soyo and Cabinda. Soyo is in a more advanced state, with “plug-and-play” infrastructure that enables concentrated investment in utilities, roads, and port access, reducing project execution risk. While identified industrial zones can help mitigate location risks and other risks associated with greenfield projects, including, land issues, biodiversity impacts, and community engagement, risks tied to existing industrial sites and brownfield areas may be harder to mitigate due to environmental, health, and safety conditions, as well as legacy environmental and safety liabilities. Thus, enhancing regulatory and institutional capacity to manage environmental and social impacts from petrochemical projects is key. This includes establishing adequate environmental standards for waste management as well as strengthening environmental permitting and monitoring mechanisms consistent with international standards.

With the right enabling reforms, Angola holds sound fundamentals to serve the growing local and regional demand for high-value chemicals. Angola's incipient petrochemicals derivatives industry relies on imported raw materials, including approximately 500,000 tons annually of olefin resins and end-use products, valued at current market prices of US\$0.5 billion. In contrast to the outlook for oil demand, global demand for high-value chemicals and by-products is expected to grow at over twice the rate of refined products in the foreseeable future.³⁸

Rising demand and the need for attractive margins has driven oil companies to integrate along the petrochemicals value chain. Bulk petrochemicals underpin the production of critical derivatives, or "building blocks," including aromatics, olefins, such as ethylene, propylene, and butadiene, and methanol. More than 90 percent of all organic chemical compounds are derived from these building blocks.³⁹ These core products are further transformed into downstream derivatives used across a wide range of industries, including textile products, appliances, furniture, and automotive manufacturing (see figure 4.1).

Figure 4.1

A Small Number of Primary Chemicals Are Building Blocks of a Large Array of End-Products



Worldwide, olefin production is dominated by producers in China, the United States, and the Middle East, which have strategically located operations near abundant, low-cost feedstock, or major consumption markets. Major hydrocarbon producers, particularly in the Middle East, have made significant investments in petrochemicals to diversify their economies, increase the value extracted from natural resources, generate employment, and prepare for the eventual reduction in liquid fuel demand as the energy transition accelerates.

Ethylene and propylene, commonly known as light olefins, are fundamental building blocks for the production of the polymers that underpin the manufacturing of many end-use products in the petrochemicals industry. Olefins can be produced from a range of feedstocks, including natural gas liquids (NGLs) and refinery by-products such as naphtha, ethylene, and propylene; in Angola, NGLs and refinery naphtha are currently available, while future refinery developments may expand the availability of ethylene and propylene. Combined global production of ethylene and propylene is estimated to be approximately 360 mtpa, and these chemicals form the basis for a wide range of chemical derivatives and end-use products essential to modern life—spanning from packaging and textiles to construction material, automotive components, and medical supplies.

Global demand for ethylene and propylene is projected to grow significantly in the coming decades. Projections by the OECD suggest that under current policies, global olefins consumption could almost triple by 2060,⁴⁰ driven by: population growth; increased demand for lightweight materials in industries such as renewable energy and automotive; rising need for agricultural efficiency and productivity; and growth in global wealth and consumer spending power. While OECD countries are expected to double their plastic consumption, the most dramatic increases are anticipated in emerging markets. Sub-Saharan Africa is expected to experience a sixfold increase and Asia a tripling of usage. Polyolefin use is expected to grow across all applications, with the fastest expansion occurring in transportation, construction, and packaging—currently the dominant sectors accounting for 60 percent of all use.

Ammonia, on the other hand, is an important building block for all mineral nitrogen fertilizers. Urea is one of the most widely used ammonia-based fertilizers due to its low cost, high nitrogen content, and versatility in agricultural applications. Its production depends heavily on natural gas as both a fuel and feedstock. Establishing fertilizer manufacturing in Angola would be transformative for Angola and neighboring countries—reducing import dependency and eliminating shipping costs, customs duties, and currency risks, while ensuring timely supply for farmers to apply fertilizer at optimal stages of the crop cycle. This would reduce yield variability and improve productivity. Research indicates that a 20 percent increase in fertilizer use in Africa can boost rice and maize yields by 10–30 percent, with outcomes highly dependent on initial soil nutrient conditions, rainfall

and water management, and the adoption of complementary inputs and good agricultural practices. Angola's current application rates remain far below recommended levels, but local production could gradually close this gap, enhancing soil fertility and food security. More productive agriculture would strengthen self-sufficiency and shield Angola from global food price shocks. Nigeria's experience illustrates the potential: domestic fertilizer production reduced prices by about 30 percent, doubled consumption within five years, and turned the country into a net exporter of urea.

There are several opportunities to produce value-added petrochemicals in regions rich in oil and gas feedstocks like Angola. Sonangol, the country's national oil company, is pursuing two major refinery projects: the expansion of the existing Luanda Refinery and the development of a new refinery in Lobito. Both projects are at the early stages and could produce feedstock needed for petrochemicals manufacturing. If advanced, these initiatives could create strategic opportunities to establish fully integrated refining and petrochemicals production in Angola, supporting the manufacture of various by-products.

Angola's petrochemicals sector is emerging at a time when global industry standards are rapidly shifting toward lower-carbon and resource-efficient production. Given the country is developing this sector from a clean slate, it has a unique advantage: the ability to embed international best-available technology and environmental standards from the outset. With gas identified as the primary feedstock in the master plan, Angola's pathway is inherently less emissions-intensive than oil- or coal-based alternatives. Furthermore, the development of a petrochemicals and fertilizer industry in Angola could contribute to the creation of sustained demand for associated gas, supporting national efforts to reduce gas flaring over time. This positions the country to become a competitive, lower-carbon producer in global markets. Angola can amplify this advantage by adopting modern conversion technologies, energy-efficient utilities, carbon-capture readiness, water recycling systems, and circularity principles such as industrial symbiosis and advanced waste-heat recovery. Embedding these requirements early will not only mitigate climate and transition risks but also unlock access to climate-aligned financing and international partnerships, strengthening Angola's industrial competitiveness as global markets increasingly value lower-carbon chemical production.

Constraints and Recommendations

CONSTRAINT 1. The petrochemicals industry is nascent with no dedicated legal framework. The sector's high capital intensity and long payback periods require a predictable investment climate. Existing burdensome entry conditions, such as high upfront financial guarantees and rigid contractual terms, deter potential investors.

RECOMMENDATION 1A. Draft and adopt a petrochemicals law that consolidates licensing requirements, land use rules, environmental safeguards, and references to applicable investment incentives in the Private Investment Law. These incentives may include fast-tracked permits and visas, institutional support, and fiscal incentives. This would provide long-term certainty to investors.

RECOMMENDATION 1B. Eliminate the requirement for a guarantee equivalent to 50 percent of project costs for petrochemical investments and replace it with performance-based milestones, such as final investment decision and commissioning. Furthermore, replace rigid take-or-pay clauses in gas supply agreements with flexible, performance-based contracts that include ramp-up periods, make-up rights, and price adjustment clauses to reflect market cycles.

RECOMMENDATION 1C. Launch competitive tenders for petrochemicals projects using clear, published criteria and standardized bidding documents. This may include the use of transparent and merit-based evaluation criteria such as proven technical capability, global experience, and access to finance.

CONSTRAINT 2. Angola's petrochemical development is constrained by limited access to competitively priced and reliable gas feedstock. Most associated gas and NGLs are currently exported with minimal volumes reserved for domestic transformation. This lack of domestic feedstock allocation and transparent pricing mechanisms undermines project bankability and delays the emergence of a local petrochemical value chain.

RECOMMENDATION 2A. Enforce the ban on routine flaring, and channel the captured associated gas into a national gas aggregation system that prioritizes domestic industrial uses, particularly fertilizers and petrochemicals, before export.

RECOMMENDATION 2B. Design a structured domestic gas allocation mechanism to secure fixed volumes of NGLs and gas condensates from existing and upcoming oil and gas operators for priority petrochemical projects. The mechanism may include specific allocation criteria, pricing principles, contract duration, and eligibility for first-mover investors.

RECOMMENDATION 2C. Establish a transparent, formula-based industrial gas pricing framework, indexed to regional benchmarks and anchored in multiyear supply contracts, to provide predictability and attract long-term private investment.

CONSTRAINT 3. Large-scale petrochemical projects require world-class infrastructure, including land, power, water, ports, roads, and waste management systems. Angola currently lacks preserviced industrial zones with sufficient gas connectivity, increasing project risks and costs. Dispersed infrastructure planning across regions limits economies of scale and dilutes public investment efficiency.

RECOMMENDATION 3A. Designate Soyo, Cabinda or a comparable gas-abundant site as the core gas-to-chemicals industrial zone. This will facilitate the concentration over time of infrastructure, including roads, power, water, port access, and waste treatment, to anchor petrochemical and fertilizer plants.

RECOMMENDATION 3B. Building on the comprehensive framework for the industry and the Private Investment Law, grant special industrial zone status to the designated site (see Recommendation 3A), backed by enabling legislation to (1) protect foreign ownership rights, (2) streamline permitting, and (3) permit repatriation of profits.

RECOMMENDATION 3C. Develop shared-use utilities, such as water treatment, industrial gas pipelines, and cogeneration, through public-private partnership or concession models for cost-efficient last-mile infrastructure.

CONSTRAINT 4. The absence of an integrated policy body coordinating gas, industrialization, and fertilizer programs as well as environmental standards results in fragmented decision-making and misaligned incentives.

RECOMMENDATION 4A. Create a permanent interministerial gas-to-chemicals entity comprising participants from the Ministry of Mineral Resources, Petroleum, and Gas; Ministry of Industry and Commerce; Ministry of Finance; Ministry of Environment; the National Agency of Petroleum, Gas, and Biofuels; Sonangol; and the Agency for Private Investment and Exports Promotion. The entity would coordinate infrastructure planning, feedstock allocation, incentives, and investment promotion, and would serve as a “single voice” for government in dealing with investors and developers.

CONSTRAINT 5. Future competitiveness will depend on compliance with emerging green standards. Without integrating low-carbon technologies, Angola risks future trade barriers and financing constraints. As petrochemicals and fertilizers are traded internationally and are increasingly subject to carbon-related disclosure and pricing rules, aligning these standards will proactively help protect Angola’s export competitiveness in this nascent industry, attract investor interest, and facilitate access to sustainable financing.

RECOMMENDATION 5A. Introduce sustainability-linked operational incentives such as faster permitting procedures, priority access to facilities, or public recognition through certification labels; such incentives could benefit petrochemical plants incorporating carbon capture, reuse, or green hydrogen feedstock.

RECOMMENDATION 5B. Update environmental permitting guidelines to include industry-specific technical standards for petrochemicals—including emissions thresholds, waste and water management, and safety requirements—aligned with international standards and principles.

4.3

Impact

Angola stands at a pivotal moment to unlock its petrochemical and fertilizer potential. By implementing a series of reforms—anchored on a clear legal framework, reliable feedstock allocation, world-class industrial infrastructure, and streamlined regulatory processes—the country can create a competitive, investor-friendly environment. These reforms will reduce project risk, enhance transparency, and enable integration into regional and global value chains. If fully executed, this reform agenda could attract at least US\$3.6 billion in private investment and generate approximately 42,600 jobs, positioning Angola as a leading industrial hub in Sub-Saharan Africa and driving inclusive economic growth (see appendix A).

Table 4.1

Policy Actions for Increasing Private Investment in the Petrochemicals Sector

Constraint	Recommended actions
1. Regulatory and financial barriers to private investment. High upfront guarantees, rigid contracts, and fragmented licensing deter investors.	1a. Enact a Petrochemicals Legal and Regulatory Framework consolidating licensing, land, environmental, and fiscal provisions. 1b. Eliminate 50 percent project cost guarantee; replace with performance-based milestones. 1c. Introduce flexible gas supply contracts with ramp-up periods and price adjustment clauses. 1d. Implement transparent, competitive tendering for petrochemical projects. <i>Responsible government entities: ANPG and AIPEX.</i>
2. Limited and unreliable domestic feedstock supply. Lack of visibility to long-term supply of feedstock reduces investor confidence.	2a. Enforce elimination of routine flaring and channel gas into a national aggregation system prioritizing domestic use. 2b. Renegotiate Angola Liquefied Natural Gas framework to allocate fixed domestic volumes at transparent prices. 2c. Establish formula-based industrial gas pricing indexed to regional benchmarks. <i>Responsible government entities: ANPG and Sonangol.</i>
3. Inadequate enabling infrastructure and industrial sites. Absence of preserviced industrial zones with gas connectivity increases costs.	3a. Designate Soyo (or similar) as gas-to-chemicals industrial zone. 3b. Grant special industrial zone status with foreign ownership rights, streamlined permitting, and fiscal incentives. 3c. Develop shared utilities (water treatment, cogeneration) to reduce capital expenditure. <i>Responsible government entities: MIREMPET, ANPG, MINDCOM, and AIPEX.</i>

(Table continues next page)

Table 4.1

Policy Actions for Increasing Private Investment in the Petrochemicals Sector (*continued*)

Constraint	Recommended actions
4. Lack of institutional coordination across energy, industry, and agriculture. Fragmented institutional coordination and misaligned incentives.	4. Create an interministerial gas-to-chemicals task force to coordinate feedstock allocation, infrastructure planning, and investment promotion.
	<i>Responsible government entities:</i> MINPLAN, MIREMPET, MINDCOM, MINFIN, MINAMB, ANPG, Sonangol, and AIPEX.
5. Limited environmental and climate alignment. Lack of green standards risks future trade barriers and financing constraints.	5a. Introduce sustainability-linked incentives for plants adopting carbon capture or green hydrogen.
	5b. Align environmental permitting with international standards and principles.
	<i>Responsible government entities:</i> MIREMPET, MINDCOM, MINAMB, and ANPG.

Note: AIPEX = Agência de Investimento Privado e Promoção das Exportações de Angola (Agency for Private Investment and Exports Promotion); ANPG = Agência Nacional de Petróleo, Gás, e Biocombustíveis (National Agency of Petroleum, Natural Gas, and Biofuels); MINAMB = Ministério do Ambiente (Ministry of the Environment); MINDCOM = Ministério da Indústria e Comércio (Ministry of Industry and Trade); MIREMPET = Ministério dos Recursos Minerais, Petróleo e Gás (Ministry of Mineral Resources, Oil and Gas).



5

Independent Power Transmission

AT A GLANCE

- Angola's increasing electricity generation capacity has yet to yield benefits to businesses, which remain constrained by limited transmission interconnections. Private investment in independent power transmission (IPT) could help distribute power to serve the industrial demand in Angola and neighboring countries.
- Although the 2025 legal amendment allows private investment in building and operating transmission lines, potential private investors remain constrained by unclear secondary legislation on power purchase and interconnection pricing, risk management concerns, the lack of an updated power sector master plan, and foreign investment requirements that are not well suited for the power sector.
- Investment in the sector requires reforms that allow IPT investors to negotiate connection fees with Empresa Pública de Produção de Electricidade (Public Electricity Production Company; PRODEL), while freely negotiating power prices with final users outside of the Public Electricity System (Sistema Elétrico Público), as provided under the General Electricity Law No. 6/25. Other necessary actions include updating the country's least-cost energy plan, publishing conditions for power agreements among off-takers, generators, and lenders to mitigate risks, and adapting job-creation requirements in investment laws to the utility sector.
- Implementing these recommendations could contribute up to US\$9.2 billion in private investment and create up to 89,000 direct jobs in the medium term, by 2036.

Sector Context and Potential Opportunity

Angola's growing power generation capacity is underutilized and cannot meet industry demand due to limited electric power transmission lines and lack of inter-connection with the Southern African Power Pool (SAPP). Total on-grid and off-grid generation capacity in Angola expanded from 2.3 gigawatts (GW) to 6.5 GW between 2014 and 2024, led by hydropower at 3.7 GW in 2024.⁴¹ But total on-grid peak power demand was only 2.6 GW, indicating 56–60 percent excess capacity.⁴² Nearly all generation comes from publicly owned power plants, administered by PRODEL.⁴³ New projects are planned or under construction, like the Caculo-Cabaça hydroelectric power station, with over 2 GW of capacity, which is expected to be completed by 2027.⁴⁴ In the regions around the Lobito Corridor alone, Rede Nacional de Transporte de Electricidade (National Electricity Transmission Network; RNT) has identified power needs of over 2 GW for industrial and commercial clients.⁴⁵

As of 2025, Angola is a nonoperating member of the SAPP and does not import or export electricity. Angola plans to connect to the SAPP, the most sophisticated power trade framework in Sub-Saharan Africa, through Namibia once the jointly developed Baynes hydroelectric power plant is completed.⁴⁶ This would be a critical step toward Angola's participation in future energy trade initiatives, like the prospective Africa Single Electricity Market proposed by the African Union, along with other integration discussions in the context of the African Continental Free Trade Area (AfCFTA).⁴⁷

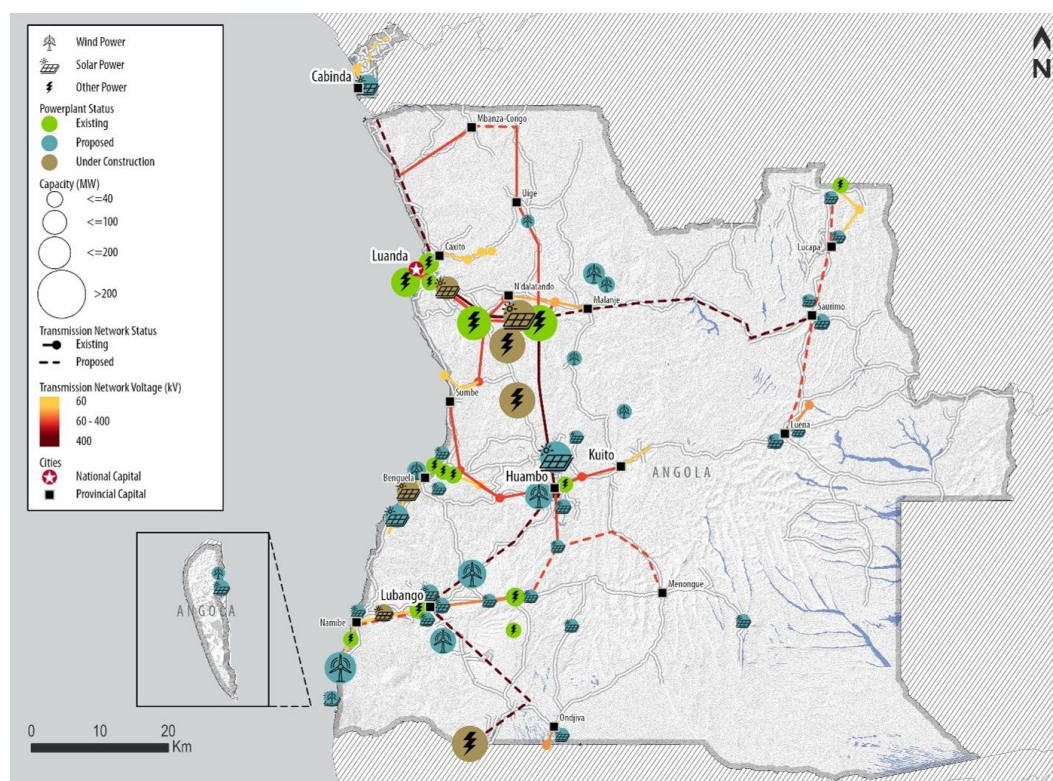
Domestically, Angola operates five main grid systems. The northern grid, which includes the capital, Luanda, is the most developed and transports 80 percent of the power supply (figure 5.1).⁴⁸ Coverage in the other regions is minimal. The southern region has substantial solar power potential, but even if developed, other provinces cannot benefit from this resource due to the absence of interconnection. These constraints limit access to affordable electricity, reduce supply quality, increase generation costs, and represent a missed opportunity for broader wealth distribution.

Between 2013 and 2023, the total national electricity access rate increased from 38.4 percent to 51.1 percent, while the urban electricity access rate increased from 68.6 percent to 77.9 percent. Available data indicate that the rural electricity access rate increased from 0.7 percent in 2006 to 7.3 percent in 2018.⁴⁹ By 2050, the Angolan government aims to achieve a 72 percent total on-grid electricity access.⁵⁰

Unmet electricity demands by the industrial sector in 2023 amounted to 8.1 GW, of which 69 percent was domestic demand and 31 percent was for export.⁵¹ RNT faces challenges in investing in the extension of transmission lines to meet those industry demands. Regulated tariffs are below cost recovery levels, and the weak operational and

Figure 5.1

Power Transmission Lines in Angola Can Grow to Connect Power Intensive and Nonconnected Regions in the East and South



Source: RePP (2023).

commercial performance of the national utility, Empresa Nacional de Distribuição de Electricidade (ENDE), affects the entire sector. The average end-user tariff, the lowest in the southern Africa region, was increased by an average of 30 percent to Kz 16.6 per kilowatt-hour (kWh) or US\$1.7 per kWh in June 2025, but this increase does not allow the recovery of operating costs and is well below the cost recovery tariff of US\$7.8 per kWh.⁵² The three utilities responsible for electricity generation, transmission, and distribution are in a fragile financial state, with limited capacity to invest or sustain daily operations.⁵³ RNT's financial and operational performance is in need of improvement: in 2023, the electricity payment collection rate to ENDE is at 43 percent, receivables at 1,296 days, payables at 1,279 days, system average interruption duration index at 25 hours per year, and system average interruption frequency index at seven interruptions per customer per year.⁵⁴ Not surprisingly, 41.5 percent of Angolan companies consider access to energy to be a major or severe constraint and 69 percent own generators, more than the averages in Sub-Saharan Africa of 39.5 and 48.1 percent, respectively.⁵⁵

IPT projects offer potential private investment opportunities to link power generation and demand by industrial firms in Angola and abroad. RNT received over 40 expressions of interest from potential high voltage and extra high voltage industrial customers in 2023, with proposals for electricity purchase prices higher than the prices under the RNT.⁵⁶ IPT projects can help connect industrial clients within Angola and in neighboring countries to power plants in remote areas. In this case, the IPT operator would pay a connection fee to PRODEL, who would also receive from final industrial clients the nationally regulated tariff by the Regulatory Institute for Electricity and Water Services (Instituto Regulador dos Serviços de Electricidade e de Água; IRSEA), in the same way as ENDE would. The IPT would then be free to negotiate the price of power directly with the industrial client. Internationally, IPTs can generate foreign currency revenues from exports and help Angola comply with the necessary conditions to interconnect with SAPP. In addition, private investment in IPTs can unlock potential opportunities for the private sector in power distribution. In this way, private sector capital can help ease the liquidity issues in the system through more stable income streams. While IPTs can advance and help relax the financial health constraints of Angola's electricity system, they themselves cannot address the need for national tariff reform, which is essential for the development of projects beyond private-to-private transmission.

In July 2025, amendments to the General Electricity Law clarified the scope for private participation along the electricity supply chain, including transmission, and to remove the single-buyer obligation from RNT.⁵⁷ The amended law allows transmission operators selling power outside the Public Electricity System (Sistema Elétrico Público) to freely negotiate prices with end users.⁵⁸ However, the Angolan legal framework for private investment in IPT still requires important secondary legislation. Since the amendment was passed, four agreements for private investment in new power lines have been announced, but these are yet to materialize as of November 2025. This is due in part to the fact that the General Electricity Law does not include text regarding implementation. The secondary legislation is also needed to clarify issues related to the setup of the market operator, tariffs, and contract terms in new purchasing power agreements (PPAs) between generators and IPT operators, and investor protection measures and guarantees. In addition, foreign investment in the sector faces difficulties resulting from other laws that are not adapted to utilities' business models and technical and operational characteristics, such as minimum job quotas for domestic workers. Moreover, the electricity sector still lacks an updated power sector plan that reflects the amendment of the General Electricity Law, creating uncertainties for potential investment in the sector. Reforms that tackle these constraints can have benefits beyond IPT by creating a demonstration effect of the impact that regulation to advance a reform agenda has on bolstering private sector participation in the power sector.

Domestic investors without access to foreign currency lack long-term financing facilities for IPTs. Long-term financing in local currency for terms over 15 years, which is generally required by IPTs, is virtually unavailable in the domestic banking sector. Consequently, infrastructure and energy projects must rely on US dollar–denominated loans from multilateral financial institutions and development finance institutions. This currency mismatch between project revenues in Angolan kwanza and debt obligations in US dollars imposes exchange rate risk and discourages domestic investment in the sector. All four agreements announced for private investment in new power lines involve foreign investors.

5.2 Constraints and Recommendations

CONSTRAINT 1. Electricity tariff regulations do not cover the prices that the power generator, PRODEL, may charge IPT operators to connect to the generator and purchase power. Under these circumstances, PRODEL forgoes potential revenue from IPTs, and potential private investment opportunities in IPTs remain unrealized.

RECOMMENDATION 1A. Establish a connection fee and a power purchase price per kWh for IPTs purchasing power from PRODEL. In 2023, RNT estimated that, for the potential IPT projects identified, industrial end users would be willing to pay US\$9.8 per kWh, which is more than the public utilities' cost of electricity service to end users, estimated at US\$7.8 per kWh in 2025.⁵⁹ A combination of an upfront connection fee to connect to the electricity generator and a tariff that covers generation costs could improve PRODEL's financial health, enable industrial end users to access grid power, and facilitate planning for investors.

CONSTRAINT 2. Angola lacks an up-to-date least-cost geospatial power sector master plan that reflects the amendment to the General Energy Law, increasing uncertainty for potential private investors. An updated power sector plan is essential to inform private invest decisions by identifying specific gaps and potential areas for new transmission lines, accounting for growing power demand, and supporting diversification of the electricity supply mix to avoid overreliance on hydropower.

RECOMMENDATION 2. Update and make publicly available the long-term power sector plan, including demand projections, an assessment of the technical and economic potential of all energy sources, and project prioritization based on national development goals. Angola should develop and regularly update a comprehensive least-cost geospatial power sector long-term plan, or integrated resource plan, to guide private investors and realize sustainable and efficient sector growth.

CONSTRAINT 3. The absence of direct agreements⁶⁰ among entities to PPAs, including the IPT operator or off-taker, the power generator, and lenders, limits the ability to mitigate risks faced by private investors. Without provisions addressing termination risks, such as lack of power supply caused by droughts and political events, private investors face significant potential losses, making projects riskier and less likely to attract funding. These risks are especially high for PRODEL under climate scenarios involving droughts that affect hydropower availability, which may become increasingly common in Angola given observed temperature rises.⁶¹ Droughts are one of the most significant risks for the country, given the prevalence of hydropower in its generation capacity. Direct agreements can enhance transparency and provide clearer rules for investors in the sector.

RECOMMENDATION 3. Adopt and publish legislation on dispute settlement mechanisms between PRODEL and IPT investors. Given the challenges of the regulatory environment in Angola, investors still face risks from regulatory uncertainty, even after the changes of the General Electricity Law. Establishing transparent requirements for guardrails for direct agreements and PPAs is critical to supplement the amendments to the General Electricity Law.

CONSTRAINT 4. Compulsory national workforce quotas for foreign investment projects have not been adapted to the power sector. Investment regulations, including the Private Investment Law (Law No. 10/18, article 46), and rules on foreign investment and job creation are designed for traditional industrial projects, which are more employment intensive than utilities. The uniform application of these requirements affects staffing capabilities for foreign investors in IPT projects. To ensure clarity and attract investment, regulations should be adapted to reflect the specific characteristics of different project types.

RECOMMENDATION 4. Revise Article 46 of the Private Investment Law on mandatory employment quotas in foreign private sector projects to allow flexibility for the power sector. Employment quotas for nationals in foreign investment projects should be reviewed and tailored to the specific needs of different sectors, based on their labor intensity during both construction and operations. This would avoid overly generic requirements that impose costs on sectors, such as utilities, that create limited employment during their operational phases.

Risks to Be Managed

Reforms to the IPT sector must mitigate risks stemming from potential abrupt changes in regulation and pricing. The reforms discussed aim to benefit IPTs that purchase energy from PRODEL at preagreed conditions. While IPTs may offer an opportunity to improve the financial health of PRODEL and public generation, reforms must ensure that the government of Angola does not change the contractual conditions between PRODEL and IPTs, unless this happens under preagreed circumstances.

Impact

The reforms discussed can contribute to unlocking private investment in IPTs on 52 projects identified by RNT for commercial clients in Angola and in neighboring countries, supplying up to 8.1 GW.⁶² These projects can add up to an estimated additional 12,000 kilometers of power lines in the country. In the next 10 years, these projects can be partially constructed (assuming a construction period of at least 15 years) and can contribute to generating up to US\$9.2 billion in additional investment and 89,000 direct jobs, mostly from the construction of these power lines (see appendix A).

Table 5.1

Priority Policy Recommendations for Increasing Private Investment in IPTs

Constraint	Recommended actions
1. Inadequate tariff regulations. Electricity tariff regulations do not cover the prices that the power generator, PRODEL, may charge IPT operators to connect to the generator and purchase power.	1a. Establish a connection fee and a power purchase price per kWh for IPTs from PRODEL. <i>Responsible government entities:</i> MINEA, PRODEL, and IRSEA.
2. Outdated power sector masterplan. Angola lacks an up-to-date least-cost geospatial power sector master plan that reflects the amendment to the General Energy Law, increasing uncertainty for potential private investors.	2. In the current long-term power sector plan, Angola needs to update the following: (1) demand projections, (2) assessment of the technical and economic potential of all energy sources, and (3) prioritization of projects based on national development goals; while also making the plan publicly available. <i>Responsible government entities:</i> MINPLAN, MINEA and MINFIN.
3. Unclear dispute settlement mechanisms in direct agreements between PPA entities. The absence of direct agreements among entities to PPAs, including the IPT operator or offtaker, the power generator, and lenders, limits the ability to mitigate risks faced by private investors.	3. Adopt and publish legislation on dispute settlement mechanisms between PRODEL and IPT investors. <i>Responsible government entities:</i> MINEA, PRODEL, MINFIN, and MINJUSDH.
4. Absence of compulsory job quotas for national workforce. Compulsory national workforce quotas for foreign investment projects have not been modified to contain adaptations necessary for the power sector.	4. Revise Article 46 of the Private Investment Law on mandatory employment quotas in foreign private sector projects to allow flexibility for the power sector. <i>Responsible government entities:</i> MAPTSS.

Note: IPT = independent power transmission; IRSEA = Instituto Regulador dos Serviços de Electricidade e de Água (Regulatory Institute of Water and Electricity Services); MINEA = Ministério da Energia e Águas (Ministry of Water and Energy); MINFIN = Ministério das Finanças (Ministry of Finance); MINJUSDH = Ministério da Justiça e dos Direitos Humanos (Ministry of Justice and Human Rights); PRODEL = Empresa Pública de Produção de Electricidade (Public Electricity Production Company).

Appendix

Appendix A

Jobs and Investment Estimates

The general approach adopted in this report was to evaluate the potential for investment and jobs in the sectors from policy reforms. The approach estimates the output that could be produced in the three selected sectors over the medium term. Investment and employment estimates are only indicative. The estimates rely on secondary data from various sources and expert consultations, without formal primary surveys. As such, the estimates are not based on detailed feasibility studies or statistical analysis. For all three sectors included in the report, estimates assume that there are no interest rates or financing costs, and no replacement or operation and maintenance costs. All prices are in real 2025 US dollars, unless otherwise noted.

The estimates are only indicative, using simplified methods, and fair comparisons with alternative options are not possible. The estimates rely on secondary data from various sources and expert consultations, without formal primary surveys. As such, the estimates are not based on feasibility studies or statistical analysis such as regressions and sophisticated modeling. Yet, the indicative preliminary estimates could help interested stakeholders, including private investors and government officials, to assess the desirability of advancing the reform agenda in each sector.

A.1. Poultry Feed: Maize and Soybeans

A.1.1 *Approach and Methodology*

The analysis considers a top-down approach to determine the land, processing, livestock farming, and abattoir needs over a period of five years. The analysis uses information from Angola's PLANAPÉCUÁRIA (Plano Nacional de Fomento e de Desenvolvimento da Pecuária; National Plan for the Promotion and Development of Livestock) for abattoir capacity for bovines, goats, pigs, and chicken; chicken and egg production by firm and first-level administrative level, province; grain processing capacity in the production of feed mill rations by company and province; and distribution of farmland between smallholder and commercial farms producing maize, soybeans, and wheat. Then, using the population five-year compound annual growth rate of 3.5 percent (2025 Angola National Statistics Office) and production and import values in tons of maize, soybeans, chicken meat, eggs, milk, and pork, the calculations determine the number of hectares needed to produce the amount of animal protein needed to substitute a share of imports.

A.1.2 *Assumptions*

Angola imported 226.5 kilograms (kg) per capita in chicken meat, eggs, milk, and pork in 2023 (2025 BACI Trade Data). This is less than the Sub-Saharan Africa average (334.2 kg per capita) and the value expected for the country's income level. The sector consultations noted that in the medium term, if reforms are undertaken, the country can feasibly develop the production capacity to produce the equivalent to 30 percent of what the country currently imports, given consumption growth from domestic production.

To reach the 30 percent import volume target for local poultry meat production, the calculation assumes the following animal feed ratio: 60 percent maize, 30 percent soybean bran, and 10 percent wheat bran. It then calculates the amount of feed needed to produce the target amount of animal protein. Using the current production gap for maize and soybeans, the analysis determines the land required to produce these amounts at yields of 6 tons per hectare for maize and 3 tons per hectare for soybeans. These yields are high compared with national averages of 1.2 tons per hectare for maize and 1 ton per hectare for soybeans (2025 FAOSTAT), but they are realistic for the areas under consideration, which tend to have economies of scale, especially on larger farms.

Jobs estimates assume eight workers per 100 hectares for medium-scale farms and three workers per 100 hectares for large-scale, commercial farms. Feed mill jobs assume an average of 10 workers per 2,000 tons of feed production. Poultry production and processing jobs assume a ratio of one worker for every 25,000 chicks. For investment estimates, one hectare of maize requires US\$1,300 in inputs per year, and one hectare of soybeans

requires US\$850 in inputs per year. Farms also require US\$150,000 in equipment and facilities for every 100 hectares farmed—both soybeans and maize—comprising US\$100,000 in infrastructure facilities and US\$50,000 in other investments. The cost of a ton of feed, based on the costs of the WM feed project in Angola, is US\$312.5 per ton, and the cost of a chick, based on the Carrinho Project in Angola, is US\$2.39 per unit.

Potential investment opportunities are broken down by value chain component:

- **Primary production of grains (maize and soybeans).** Given Angola's production cost context, cultivating the essential raw materials for feed would require approximately 33,000 hectares for maize and 42,000 hectares for soybeans. The associated investment opportunity with this expansion in the primary production sector is estimated at US\$305 million in capital expenditure, from the sum of equipment to process soy and maize (US\$114 million), construction costs (US\$76 million) and incidentals (US\$114 million).
- **Feed production.** Meeting the demand generated by increased domestic poultry production would require an additional 336,000 tons of feed. This would require an estimated investment of US\$55 million in capital expenditure for feed production infrastructure.
- **Poultry production (broilers and breeders).** Fattening 87 million broiler chickens per year would require additional production infrastructure. To ensure the sustainability of day-old chick production, a parent stock of 582,000 hens and corresponding incubation capacity would be needed. Regarding processing, slaughter capacity would need to increase to 397,000 birds per day. The total investment required for this poultry component is US\$156 million in capital expenditure.
- **Pork production.** The model includes investment in a facility that holds 245,000 pigs to be fattened per year. The total investment required in this component is US\$85 million.

A.1.3

Results

Implementing the recommendations could contribute to approximately US\$602 million in private investment and 20,000 jobs in the medium term, by 2036, in the animal feed and poultry sectors in Angola. This includes 5,000 jobs in primary production, 2,000 jobs in feed mills, and 13,000 jobs in poultry production.

A.2. Olefins and Fertilizers

A.2.1 *Approach and Methodology*

The analysis uses a bottom-up approach to determine the necessary investment to build a 1 million metric ton per annum (mtpa) fertilizer, or urea, plant and a world-class olefins plant, with capacity to produce 0.5 mtpa of ethylene using liquified natural gas (LNG) feedstock, both in Soyo. A conservative scenario includes only the urea plant, while an optimistic scenario includes both the urea and olefins plant. Soyo was chosen based on the colocation of an LNG refinery, which makes feedstock readily available and minimizes transport costs. Investment plans currently exist for both facilities, but investors in these sectors face constraints.

For context, Angola's Natural Gas Master Plan (Plano Director de Gás) contemplates that, by 2031, 30 percent of natural gas produced will be used for local transformation. The investments associated with this plan would increase the potential availability of feedstock for the urea and ethylene industries in the country.

A.2.2 *Assumptions*

The report considers the capital expenditure required to build both facilities in Angola, benchmarked against the capital expenditure of the Indorama Eleme Petrochemicals Limited (IEPL) facility in Nigeria, estimated at US\$575 million. A fertilizer facility in Soyo is estimated to cost US\$2 billion and could potentially produce 1.46 mtpa. This facility is a project that already has buy-in from international investors and seeks to leverage existing LNG and refining facilities.

In addition to the fertilizer facility, the analysis considers the construction of a potential olefins facility, also in Soyo, based on the transformation of LNG, considering that LNG is refined and available in the area. The capital expenditure calculation is based on the cost per ton of ethylene production from LNG feedstock, estimated at US\$1,671 per ton, multiplied by the production capacity of the facility.⁶³ The capital expenditure required for this facility is estimated at US\$1.67 billion.

The jobs estimates for both facilities are based on employment figures from the construction of large ethylene facilities in the United States and Gulf Cooperation Council (GCC) countries, which used 8,500–10,000 workers per year to build facilities with a capacity to produce 1 mtpa. For the operational phase, the calculation uses the associated personnel from facilities in the United States and GCC countries, in addition to those accounted for

in the IEPL facility in Nigeria, for an estimated 300 job-years for each facility. It also applies a multiplier of four indirect and induced jobs for every direct job during the operational phase. Construction is assumed to last four years.

At the time of consultations, to the team's knowledge, no such facilities under construction or in operation in Angola.

A.2.3 *Results*

Implementing the recommendations could contribute to approximately US\$3.6 billion in private investment and 42,600 direct and indirect jobs in the fertilizer and olefins sector in Angola over the medium term, by 2036.

A.3. Independent Power Transmission

A.3.1 *Approach and Methodology*

The analysis uses a bottom-up approach to estimate the length, capital investment, construction jobs, operational jobs, and induced and indirect jobs associated with new power lines to be constructed under independent power transmission (IPT). To determine the number of projects, the analysis uses the number of power supply orders identified by the Rede Nacional de Transporte de Electricidade (National Electricity Transmission Network; RNT) at the regional and provincial level: 52 projects for 8,122.2 MW (RNT 2023).

Since information on the length of each power line is unavailable, the analysis estimates the length of each line. The first step uses Google Earth Engine to determine the centroid of each province of Angola and the Euclidean distance to the closest international border with the Democratic Republic of Congo, Namibia, the Republic of Congo, or Zambia, as these IPT projects also aim to export power to business clients in neighboring countries and leverage Angola's membership in the Southern African Power Pool. Next, to determine the degree of ruggedness, river crossings, and land restrictions for the construction of power lines, the analysis estimates the total driving distance by road from the closest road, of any category, to the province centroid and to the coordinates of the closest international border point. In all cases, the ratio between the driving distance and Euclidean distance is 1.3–1.4. This ratio is then multiplied by the straight-line distance from the centroid to the border point to estimate the expected distance of each power line.

These estimates yield the upper-end value of total kilometers of power lines expected under IPT projects (up to 12,000 kilometers [km]), as multiple projects will also serve domestic clients and will be constructed in phases if the recommended reforms are undertaken and private investment flows into the sector.

A.3.2 *Assumptions*

Some projects identified by RNT (2023), like the Mitrelli-Hydrolink power line in eastern Angola, have announced investment values and information on length (1,150 km), voltage (400 kilovolts [kV]), cost (US\$1.5 billion) and technology (alternating current). These data allow for calibration of the cost per km that can be imputed to other power lines. The analysis also uses the cost per km from the Kalumbila-Kolwezi 330 kV Interconnector Project in Zambia, estimated at US\$250 million for 190 km. These announced projects are included in the estimates because they are constrained by the issues identified in this report. Actual investment and job values will vary, as these data points may not be fully representative of IPT projects in Angola.

Using the estimated distance of each power line, the analysis assigns the likely technology to be used for each project, depending on length: all projects of 480 km or more are assumed to use high-voltage direct current (HDVC), and the rest are assumed alternating current (AC). HDVC projects have fewer substations than AC projects, but HDVC substations are more expensive: AC substations are benchmarked at US\$30–60 million each for 220–500 kV, while HDVC substations are assumed to cost US\$100 million each.

The analysis assumes the following upper-bound jobs estimates for power lines, based on analyses for the United States cited by Americans for the Clean Energy Grid: 11.5 direct job-years per US\$1 million invested for AC power lines and 27 direct, indirect, and induced job-years per US\$1 million. For HDVC power lines, the analysis assumes 5 direct job-years per US\$1 million and 11.3 direct, indirect, and induced job-years per US\$1 million. Other benchmarked projects in the United States use operations and maintenance budget estimates of US\$8,000 per km, circuit, and year in power lines, or two full-time equivalent employees for every 300 km of power lines and two full-time equivalent employees per substation. Importantly, these figures are based on calculations done by the US National Renewable Energy Laboratory for 2013.⁶⁴

Assuming that the recommendations are implemented within the next two years and that typical transmission lines construction can take up to 15 years, the analysis scales the expected investment and job creation across all power lines to an eight-year

implementation period. This results in a 10-year medium term horizon, including the two years required to adopt the reforms. Job-years are converted into total jobs based on the duration of construction and operations.

A.3.3

Results

Implementing the recommendations could contribute up to US\$9.2 billion in private investment and create 89,000 direct jobs in the independent power transmission sector in Angola over the medium term.

Notes

1. See “Estado já arrecadou 700 mil milhões de kwanzas do Programa de Privatizações,” Angola, Ministry of Finance, <https://www.minfin.gov.ao/sala-de-im-prensa/noticias/noticia/estado-ja-arrecadou-700-mil-milhoes-de-kwanzas-do-programa-de-privatizacoes>.
2. IPTs are private sector endeavors that involve the design, construction, and financing of a single transmission line or a set of transmission lines and associated infrastructure such as substations. IPTs are implemented under a long-term contract, generally between the state-owned power generator and a project company who operates and sells transmission services to a private client.
3. IMF (2025b); World Bank (2024).
4. China has been the main export market for Angola with roughly half of all exports going there. Other major export markets include the EU (20 percent of exports), and India (8 percent of exports).
5. World Bank (2025).
6. The International Monetary Fund estimated public debt at the end of 2024 at 59.9 percent of GDP and assessed the risk of public debt distress in Angola as high (IMF 2025b).
7. According to the 2019 Census of Companies and Establishments (Recenseamento de Empresas e Estabelecimentos; REMPE).
8. INE (2024); World Bank (2024b).
9. World Bank (2024c).
10. FinScope Angola (2022).
11. These state-owned banks are Banco de Poupança e Crédito, Banco de Comércio e Indústria, Banco de Desenvolvimento de Angola. The government also controls Angola’s second-largest bank, Banco de Fomento, via its ownership of the bank’s main shareholder, the state telecommunication firm.
12. World Bank Enterprise Surveys.
13. See “Lista de emitentes,” Bodiva, <https://www.bodiva.ao/lista-de-emitentes#gsc.tab=0>. Banco Angolano de Investimentos, Banco de Comércio e Indústria, Empresa Nacional de Seguros e Resseguros de Angola (ENSA), Acrep, and Bodiva.
14. The government plans to divest holdings in several SOEs via capital markets. A major bank, Banco Angolano de Investimentos, was already partially listed (in 2022), as well as the stock exchange Bodiva (30 percent floated in 2024). The plans for 2025/26 include the main insurer ENSA, telecom company Unitel, Standard Bank Angola, Banco de Fomento Angola, and the state oil company Sonangol.
15. The government launched a second phase of privatization in 2023, targeting 73 companies, including the national oil company Sonangol and airline TAAG. Nineteen privatizations were scheduled for 2025, but so far none has been finalized.
16. Angop (2025).
17. Angola: FDI Survey, HFC Research Associates, IFC. 2025.
18. World Bank Enterprise Surveys.
19. SADRI (2025); World Bank (2022).
20. World Bank Worldwide Governance Indicators.
21. World Bank (2024a); IMF (2025a).
22. World Bank (2025a).
23. IMF (2025c).
24. IMF (2024); World Bank World Development Indicators.
25. World Bank Enterprise Surveys.
26. HFC (2019).
27. Under the Land Law No. 9/04, Angola recognizes that all land is originally owned by the state. Weak land tenure legislation and the lack of secure legal guarantees, including clean titles, are cited by most commercial banks as reasons for loan refusal rates exceeding 80 percent.
28. USDA and GAIN (2025).
29. Jobs estimates are based on the assumption of eight workers per 100 ha for medium-scale farms and three workers per 100 ha for large-scale commercial farms. Feed mill jobs assume an average of 10

- workers per 2,000 tons of feed production. Poultry production and processing are based on the number of workers needed under a production volume of around 90,000 tons per year, averaging seven workers per ton, across semicommercial and commercial production.
30. Broiler chickens are bred specifically for meat production.
 31. Layer hens are bred specifically for egg production.
 32. Feed conversion ratio in poultry is a measure of how efficiently a bird converts feed into body weight, calculated by dividing the total feed consumed by the weight gained.
 33. The average estimated unsubsidized electricity tariff ranges between US\$0.05–0.13 per kilowatt-hour (kWh), while the current subsidized rate is around US\$0.012, or 1.2 cents, per kWh. Fuel costs are currently US\$0.44 per liter for diesel and US\$0.33 per liter for gasoline, reflecting recent steps to remove diesel subsidies.
 34. Soybean cake is the solid residue left after oil extraction from soybeans and is used as a high-protein supplement for animal feed.
 35. Since the report's analysis was completed, the government of Angola has enacted Presidential Decree No. 151/26 of August 20, 2026, establishing a national Plant Variety Protection (PVP) framework administered by the National Seed Service (SENSE), aligned with the SADC PVP Protocol and consistent with UPOV 1991 standards.
 36. For example, moisture limits, impurity thresholds, mycotoxin tolerances, and grading protocols.
 37. See "Worldwide Look at Reserves and Production," Special Report, Oil and Gas Journal, December 2024, https://img.ogj.com/files/base/ebm/ogj/document/2024/12/6757438a19f0bcb15001ed29-2024_ww_reserves_and_production.pdf.
 38. IEA (2024).
 39. IEA (2018).
 40. OECD (2022).
 41. See "IRENASTAT Online Data Query Tool," International Renewable Energy Agency, <https://pxweb.irena.org/pxweb/en/IRENASTAT/>.
 42. The information of this peak demand includes total on-grid and off-grid or only on-grid is not available (World Bank 2025).
 43. State-owned utility company responsible for electricity production. It owns the majority of generating assets in the country.
 44. World Bank (2025).
 45. RNT (2023).
 46. US EIA (2025); US ITA (2024).
 47. Although AfCFTA does not yet have a specific agreement on energy trade, it can benefit energy investors through trade in services frameworks and by improving transparency and cooperation among members, thereby removing risks for continental investors (Attia 2025).
 48. World Bank (2025).
 49. World Bank Group (n.d.).
 50. See "Plano de Desenvolvimento Nacional 2023–2027: Impacto socioeconómico sustentável," Government of Angola, https://sys.portais.gov.ao/uploads/PDN_ad74f39ea2.pdf.
 51. RNT (2023).
 52. World Bank (2025).
 53. World Bank (2025).
 54. World Bank Utility Performance and Behavior Today database, <https://utilityperformance.energydata.info/>.
 55. World Bank Formal Sector Enterprise Surveys, <https://www.enterprisesurveys.org/en/data/explore/economies/2024/angola?view=table&subGroup=-1&topic=8&countries=All+Economies%2F2Fall+Economies%2F%2F2024%2F%2F7%2F%2Fnull®ions=Sub-Saharan+Africa&subtopic=42&IndicatorIds=183%2C231%2C232>.
 56. RNT (2023).
 57. World Bank (2025).
 58. Article 48, Law No. 6/25, General Electricity Law.
 59. RNT (2023); World Bank (2025).
 60. Direct agreement: governs the relationship between the lenders and the parties involved in the project (CLDP 2015).
 61. World Bank Group (2022).
 62. RNT (2023).
 63. The minimum constant selling price required to break even on an ethylene production facility over its lifetime (Shin et al. 2025). Calculated as the total capital expenditure and operational expenses, in present values, divided by the discounted value of total production of ethylene.
 64. NREL (2014).

Abbreviations and Acronyms

AfCFTA	African Continental Free Trade Area	MINAGRIF	Ministério da Agricultura e Florestas (Ministry of Agriculture and Forestry)
AIPEX	Agência de Investimento Privado e Promoção das Exportações de Angola (Agency for Private Investment and Exports Promotion)	MINAMB	Ministério do Ambiente (Ministry of the Environment)
ALNG	Angola Liquefied Natural Gas	MINDCOM	Ministério da Indústria e Comércio (Ministry of Industry and Commerce)
ANPG	Agência Nacional de Petróleo, Gás, e Biocombustíveis (National Agency of Petroleum, Natural Gas, and Biofuels)	MINEA	Ministério da Energia e Águas (Ministry of Water and Energy)
CPSD	Country Private Sector Diagnostic	MINFIN	Ministério das Finanças (Ministry of Finance)
ENDE	Empresa Nacional de Distribuição de Electricidade (National Electricity Distribution Company)	MINJUSDH	Ministério da Justiça e dos Direitos Humanos (Ministry of Justice and Human Rights)
FDI	foreign direct investment	MINSA	Ministério da Saúde (Ministry of Health)
GDP	gross domestic product	MIREMPET	Ministério dos Recursos Minerais, Petróleo e Gás (Ministry of Mineral Resources, Oil and Gas)
GE	genetically engineered	mtpa	million tons per annum
GMO	genetically modified organism	NGL	natural gas liquids
IFC	International Finance Corporation	PPA	power purchase agreement
IDA	Instituto de Desenvolvimento Agrário (Institute of Agrarian Development)	PDG	Plano Director de Gás (Natural Gas Master Plan)
INAC	Instituto Nacional da Criança (National Institute of Cereals)	PRODEL	Empresa Pública de Produção de Electricidade (Public Electricity Production Company)
INIQ	Instituto Nacional das Infra-Estruturas de Qualidade (National Institute for Quality Infrastructure)	RNT	Rede Nacional de Transporte de Electricidade (National Electricity Transmission Network)
IPT	independent power transmission	SADC	Southern African Development Community
IRSEA	Instituto Regulador dos Serviços de Electricidade e de Água (Regulatory Institute of Water and Electricity Services)	SAPP	Southern African Power Pool
Kz	Angolan kwanza	SENSE	Serviço Nacional de Sementes (National Seed Service)
LNG	liquefied natural gas	SOE	state-owned enterprise
MAPTSS	Ministério da Administração Pública, Trabalho e Segurança Social (Ministry of Public Administration, Labor and Social Security)	UPOV	International Union for the Protection of New Varieties of Plants
MAT	Ministério da Administração do Território (Ministry of Territorial Administration)		

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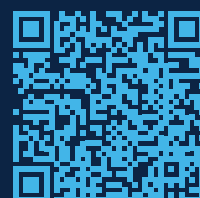
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