

MOZAMBIQUE

Major economic diversification drive gathers pace

Home to Africa's largest foreign direct investment project and a magnet for international investors and enterprises, the dynamic African nation's economy is set for takeoff

Home to Africa's largest foreign direct investment project — the \$20 billion liquefied natural gas terminal under development by international energy titan TotalEnergies in Cabo Delgado province — Mozambique is writing an exciting new chapter in its rich history.

That showcase energy project and other significant developments in the LNG sphere and the lucrative mining, oil and gas industries are fueling record socioeconomic development in the country of 32 million people.

While such inflows of FDI and their impact on living standards are welcomed, the government of President Filipe Nyusi is well aware of the need to invest the huge windfalls into promoting human development. In particular, monies are being allocated to social activities, education, employment and welfare initiatives for the communities affected by the infrastructure projects.

"There is need to attach importance to the diversification of our economy; we should not just focus on gas, oil or mining," Nyusi said. "We need to diversify our economy, especially as we have traditional activities such as agriculture, where we need to modernize and upgrade our technology, as well as expand the production in different areas."

"Mozambique can play an important role in energy transition through natural gas. We can be a solution, and we want to be part of this solution, looking carefully at our measure indicators. One to capitalize is sovereignty of food security. Mozambique should be able to feed itself and other countries as well."

"Regarding energy, we are supplying LNG to Europe to assist in quelling the crisis (caused by the conflict in Ukraine). We are not competing with anyone, but we want to be part of the solution to the problems of the world. We want to reduce dependence as well. Mozambique should be self-reliant and self-sufficient in many sectors."

"That's why we are capitalizing on the issue of peace," he added. "Without security, for us to develop our hydrocarbon projects cannot happen in an environment that is lacking in peace. That's why diplomatically we are trying to have more friends. We want to have zero enemies and are promoting a win-win cooperation."

Japan's cooperation benefits both sides

As a leading beneficiary of the Tokyo International Conference on African Development, Mozambique has participated for many years in a structure that strengthens relations in multilateral cooperation and partnership.

TICAD has not only ensured a steady flow of Japanese investment into African countries like Mozambique, but also paved the way for development under the principles of African ownership and international partnership.

"We want that relationship of partnership with the private-sector investment," Nyusi explained. "Nacala Port is a good example of this mutually beneficial cooperation, with the port having been expanded and the terminal modernized and equipped."

"This was a major project because Nacala Port is the deepest of the deepwater ports of



Filipe Nyusi
President

Mozambique. It is at an area where we have an excellent airport. It's a special economic zone and has a railway line that connects Malawi through Nacala Port for many products."

Support for Japanese investment in Mozambique is provided by both governments. In May, Prime Minister Fumio Kishida pledged during a visit to Maputo to provide the help needed to promote Japanese investment in natural gas projects as the African country seeks to develop more of its lucrative offshore LNG reserves.

"Japan will encourage the entry of more Japanese businessmen in Mozambique," he reaffirmed. "Cooperation in the energy sector with the development of LNG projects will continue."

Tokyo-based trading house Mitsui & Co. holds a 20% stake in TotalEnergies' flagship project, while the Japan Bank for International Cooperation has provided loans and the Japan



Omar Mitha
Chairman, Banco Nacional de Investimento

Organization for Metals and Energy Security has also invested large sums.

Regardless of the sector and scale of development, a core component of new projects is funding, which is where state-owned bank Banco Nacional de Investimento comes into play. The bank provides long-term financing for sustainable ventures that contribute to social and economic development. In recent years, it has implemented government protocols with other countries to facilitate public-private partnerships between foreign and state-owned firms.

"Our intention is to become a large-scale investment bank focused on infrastructure development as well as large-scale manufacturing on a profit-making basis, which calls for co-funding with the other financial institutions," BNI Chairman Omar Mitha stated.

"At the same time, we've been a conduit for the

state to support small- and medium-sized enterprises amid natural disasters and the pandemic that dashed companies' financials.

"The most important aspect is we have a credit system to analyze the risks. Even though there is this element, it will at least require the minimum of a business plan that will ensure coverage of the debt servicing during the tenor of the loan."

Japanese know-how highly sought

Turning his focus to the broad range of FDI openings in Mozambique's economic sectors and industries, the senior financial executive is eager to highlight some of the areas ripe for investment, including those in which Japanese enterprises have plenty of experience.

"There are so many opportunities for Japanese businesspeople, such as mining and agriculture," Mitha said. "We are an excellent food producer and are well-positioned to link Mozambique with Japan in terms of food production. We have a very long coast and Japan is very much advanced in the extraction of fish."

"Other industries include timber, tourism, information and communications technology and the automotive sector. Toyota is No. 1 in terms of market share in Africa as the sole brand that you see in every street. Mozambique would be the ideal place to relocate some automobile plants to shrink the distance between Japan and other market segments. We are better positioned for the Middle East and even for Europe. That would be an opportunity."

According to Mitha, Mozambique's renewables sector would be especially attractive for Japanese companies, given that Japan has been diversifying its energy types and sources as part of a post-Fukushima energy security plan.

We want to thank Mozambique's Ambassador to Japan Jose Maria Morais for his support in compiling this report.

Energizing the regional economy

Huge domestic and foreign investment in power capacity means Mozambique is a growing energy hub for millions

Mozambique is blessed with an array of abundant mineral and energy resources, including the vitally important Cahora Bassa Dam that has been generating vast amounts of hydroelectric power for the country — as well as other parts of the region — for almost half a century.

The impressive dam sits on the famous Zambezi River and not only supplies huge quantities of energy to Mozambique, but plays a significant role in meeting the energy needs of surrounding nations, particularly South Africa.

Diversifying and strengthening the energy matrix is a key priority for Mozambique's government over the next decade. In addition to harnessing the hydroelectric potential of the Cahora Bassa Dam, the country has made significant investments in alternative energy sources.

These include a series of new dams, solar energy and wind power, with such projects aligning with the administration's energy transition objectives. Consolidating the energy matrix is the primary goal, with operational solar power

plants already in place and others on the horizon. In addition, Mozambique is gearing up to launch its inaugural wind farms in a move that will further boost its renewable energy capacity.

Renewables offer huge power potential

"Natural gas is a valuable energy resource for us and contributes to diversifying the current energy matrix," said Minister of Mineral Resources and Energy Carlos Joaquim Zacarias. "The southern part of the country already benefits from gas fired and thermolectric power plants, with the latter alone producing around 100 megawatts."

"Additionally, efforts are underway to develop a 450-MW gas-powered plant that will make a significant impact. Mozambique's energy advancements extend beyond borders, with agreements in place with Zimbabwe, Malawi and Zambia, as the country assumes the role of an energy hub."

"These initiatives involve expanding both generation and transmission capacities, thereby facilitating energy exchange and sup-



Carlos Joaquim Zacarias
Minister of Mineral Resources and Energy

port for neighboring countries. Improving the transmission infrastructure to effectively distribute energy across different regions of the country stands as another major challenge. Mozambique's power plants contribute to both domestic and cross-border energy supply."

Energy giant ENH eyes foreign partners

The significant and unprecedented energy shock of 2022 that was triggered by the war in Ukraine continues to reverberate through the global economy, with governments and companies in Europe and on other continents scrambling to secure alternative oil and gas sources that are reliable and cost-competitive.

Mozambique, which in late 2022 officially started exporting liquefied natural gas (LNG) produced from vast reserves in the northern region of Rovuma, is well-positioned to be the alternative. The inaugural shipment for sale to the international market saw President Filipe Nyusi hail the cargo as a major milestone in the nation's socioeconomic development, as it marked the realization of over a decade of multibillion-dollar investments and underlined the energy-rich republic's potential.

Given it could become one of the top 10 gas exporters in the world through the sustainable development of its precious energy products, Mozambique is fortunate to call on the experience, talent and skills of state oil firm Empresa Nacional de Hidrocarbonetos (ENH).

Ideal partner offers wealth of experience

With decades of experience in exploration, production, commercialization, transportation and distribution of natural gas, ENH is the ideal partner for entities seeking to tap into Mozambique's oil and gas wealth.

A strong and comprehensive corporate structure provides the support and specializations for a broad range of upstream and downstream developments. ENH's affiliates include Companhia Mocambicana de Hidrocarbonetos, set up to represent ENH in gas production and processing in the Pande and Temane gas fields, Mozambique's first production fields, while Companhia Mocambicana de Gasoduto represents ENH's interest in the cross-border gas transmission pipeline known as ROMPCO (Republic of Mozambique Pipeline Co.).

Another key affiliate is ENH Logistics, which handles infrastructure and support services to the oil and gas industries, including logistics bases, maintenance and port services.

"Mozambique has the necessary attributes and resources to help address energy security supply concerns in Asia and, most recently, Europe," said Estevo Pale, ENH chairman and CEO.

"The discovery of world-class gas reserves in the north of Mozambique factually confirms this statement. For this reason, we invest in finding credible and committed partners who are able to work with ENH to unlock and



Estevo Pale
Chairman and CEO, ENH

develop the vast reserves already discovered, as well as expand the potential still to be found in the country.

"The current global context is highly complex and unpredictable. In a broader spectrum, our geographic location, equidistant access to European and Asian markets and the quality and size of gas resources, make Mozambique a long-term, price-competitive and reliable source of LNG for energy generation."

Over the past year, just over 30 LNG cargoes

'Mozambique has vast potential to become a reference LNG producer in the global market.'

Estevo Pale, Chairman and CEO, ENH

have departed Mozambique as the energy sector opens a new page in its infrastructure development story.

According to Pale, apart from working diligently with international partners on the Coral Sul LNG project, ENH is also involved in developing other energy facilities, including those with leading Japanese players such as Jera Co., Tokyo Gas Co. and Mitsui & Co.

"We see the entry of Mozambique in the global list of exporters of LNG as a stepping stone towards many more accomplishments," he added proudly. "The country has vast potential to become a reference LNG producer in the global market."

"For one, we are now able to prove that the

country is ready for projects of this magnitude. Furthermore, as more projects are materialized, so are the skills of Mozambique's human capital.

"With the latter in place, Mozambique will be in a better position to maximize the results of the oil and gas projects and best serve the needs of the various markets with better, cleaner, safer and reliable energy."

The senior executive described the deal for a majority stake in ROMPCO as "groundbreaking." ROMPCO owns and operates a 865-km pipeline that transports huge volumes of natural gas from Mozambique's Pande and Temane gas fields to markets in Mozambique and South Africa.

"The pipeline is a potential asset and enabler for other projects surrounding Pande and Temane, considering that the country is still unexplored, making the prospects of development proportionally equal," he said.

"Having the two governments as majority shareholders of the cross-border pipeline is strategic, since the pipeline is the single source of gas to the South African market and gas is the immediate alternative supplier of cleaner energy."

"As the LNG projects are gearing up, there is the possibility of bringing imported LNG to Maputo in southern Mozambique and through the ROMPCO pipeline to South Africa."

Human resources also offer hope

Given the energy industry's growing emphasis on sustainability and measures to halt climate change, ENH's extensive and proactive corporate social responsibility program makes it a good match for foreign partners.

"Areas of priority for its CSR activities are infrastructure, health, education, gender equality and food security, as they are considered enablers of change," Pale said.

"Mozambique is a young country, with much achieved since independence in 1975 and much in progress," he continued. "Our main asset, apart from the abundant natural resources, is people. Much of our population is young, with big dreams and an enthusiasm to learn, work and earn a better life."

"As such, we seek partners who aspire for the same, so that we can move forward. The opportunities are immense and diverse. We very much look forward to receiving the kind of partners that share the same aspiration and determination."

www.enh.co.mz



Dedicated to improving the lives of all Mozambicans

Banco Nacional de Investimento is the benchmark for development and investment banking in Mozambique. Enjoying privileged relationships with national and international investors and financial institutions, we are devoted to funding projects that drive innovation, contribute to the country's sustainable development and support the growth of its businesses.

3504 Julius Nyerere Avenue, Block A2
Maputo City, Mozambique
www.bni.co.mz

Transport and logistics sectors offer wealth of investment openings

The government's push to upgrade and modernize the nation's transportation networks has turned infrastructure development projects into major investment opportunities as spending climbs to expand and digitalize the operation of ports, railways and roads

With a long coastline that stretches almost 3,000 km along the southeast border of Africa, Mozambique's excellent geostrategic position gives it privileged access to several landlocked countries, making it a key maritime gateway and trade conduit for substantial volumes of goods and services each year.

The strength of other countries' reliance on its marine operations has been highlighted by the stellar growth and performance of its ports in recent years. This was illustrated clearly by the Port of Maputo's setting a new record in 2022 for the amount of cargo handled. A 20% year-on-year hike saw it move 26.7 million tons.

"Because of our proximity to Zimbabwe, Eswatini, Malawi and Zambia, we have massive regional responsibility to facilitate trade and movement within, and between, our economies," explained Minister of Transport and Communications Mateus Magala.

"We are trying to ensure that our air transport, rail transport and ports are well-integrated. Our philosophy is we have the corridors — which we call development corridors — and need to utilize them as spaces of economic opportunity.

"These corridors are not only for the movement of cargo, goods and people, but also a space of economic transformation, through industrialization, services and quality job generation, creating more inclusive and more equal societies through better incomes and new socio-economic developments.

"We are using some of the corridors as free zones, where businesses can come and profit from incentives for them to produce, to ensure they repatriate the benefits, but also so they result in decent developments for our people," Magala said.

The Mozambique government is eager to repeat the success and growth of its ports sector in other modes of transport and logistics networks. This will almost certainly involve private companies from home and abroad, meaning opportunities for foreign investors and players will be plentiful.

Port of Maputo is national success story

For the past 20 years, the Port of Maputo has blossomed under the watchful eye of Maputo Port Development Company. This public-private venture emerged from the partnership between the Mozambique Railway Company (Caminhos de Ferro de Mocimboa) and Portus Indico, comprised of Grindrod, DP World and local entity Mozambique Gestores.

"We needed to modernize our ports and understood that working with the private sector and in partnership with them, was the way to go," Magala added. "We opened concessions for the ports to private operators, allowing us to work in coordination with the best in the market.



Mateus Magala
Minister of Transport and Communications

"At the Port of Maputo, we have DP World Maputo operating the container terminal. Dubai Ports is a big player and allows us to get skills, time, market and technology; that is the best in the marketplace. Our ports operate to the same standards as leading ports. We are competing on the same key performance indicators and have the same managerial discipline and marketing discipline.

"More importantly, we understand that at the end of the day, what matters for ports is the end-to-end movement of goods. It's not just that the port is efficient. If you don't have the right connections or the right shipping lines, it doesn't matter

'Connectivity to market is very important, but these days, you can only achieve connectivity with the effectiveness that you need if you are digitalized.'

Mateus Magala
Minister of Transport and Communications

that you are efficient and you can load quickly, as you're not connected."

The experienced politician added that an increasingly important aspect for busy, international ports like Maputo is connectivity to market, which is where heavy investment in cutting-edge digital technology comes into its own.

"You can only achieve connectivity with the required effectiveness if you are digitalized," he continued. "Port of Maputo is fully digitalized,



Agostinho Langa Junior
Chairman,
Ports and Railways of Mozambique

meaning we are well aware of where the cargo was born and where the cargo will die.

"We are certainly looking for further opportunities to invest in infrastructure, technology and processes. A lot of shippers are now using our ports and the volumes have grown exponentially in a short space of time. We are adopting different approaches, one of which involves inviting the shippers to find joint solutions on how we can ship this massive growth of trade.

"Recently, we have been discussing investment in container handling and greater spending on infrastructure to improve access and capacity at our various ports. We would welcome investment from major players in the port business and from leading shipping lines."

Full speed ahead for transport projects

Given Japan's outstanding reputation for technology, design and development, the minister sees real opportunities for Japanese investors in the areas of port infrastructure and environmentally friendly forms of public and private transportation over the coming years as part of a global push against harmful emissions.

"Japan has been a trusted partner over many years and we want to keep the relationship growing because they are credible, keep their word and believe in what they commit to," Magala continued. "One of the major areas attracting Japanese investment right now is in the Nacala Corridor. We have seen around \$300 million invested in upgrades and modernization at the Port of Nacala.

"Mozambique has some of the largest graphite mines in the world. Unfortunately, this material is exported raw to foreign markets as we do not have any high-tech factories to turn it into batteries for electric vehicles, so this is a huge opportunity for Japanese companies.



CFM is creating transport and logistics solutions to meet tremendous domestic and international demand.

"Such factories could produce batteries for sale to the Mozambican market, as well as to other markets like Japan. We have the skills, raw material and an institutional framework which facilitates the repatriation of capital. Mozambique is a country that respects the right of investors to expatriate their capital without restriction."

Given the impact of Mozambique's transport networks on the standards of living for the millions of people in its landlocked neighbors, the swift movement of cargoes to and from the coastal gateways can impact national economies and companies active in a range of sectors.

Ports and Railways of Mozambique (CFM) is the state-owned company responsible for ensuring the smooth operation of rail infrastructure and rolling stock, along with the safe and efficient management of ports.

The rehabilitation and revival of old railway lines is one of the entity's most important tasks at present, with tenders for several such projects awarded to international firms in recent years, including bidders from China and India.

Progress has certainly been made, as illustrated in early 2023 when freight cars completed the first railway journey in almost 40 years from Vila Nova da Fronteira to Malawi. According to CFM, the new line will provide a major boost to freight transportation between Beira and Malawi, with passenger services also likely to be launched in

the not-too-distant future.

"We have invested in capacity increases of our railway lines, and locomotive equipment and wagons with greater capacity," explained CFM Chairman Agostinho Langa Junior.

"In tandem, we have also increased the capacity of the railway lines through the construction of new bridges to increase the weight per axle of

'We've invested in capacity increases of our railway lines, and locomotive equipment and wagons with greater capacity.'

Agostinho Langa Junior, Chairman, CFM

our compositions. Today, we make lines with a capacity of up to 27 tons per axle. Due to these investments, we saw a lot of growth in volumes both in the ports and in the railroads.

"In 2022, for example, we recorded year-on-year growth of around 6% in the port sector, and around 12% in the railways segment. We continue to invest in the modernization of the rails and the use of computerized digital management systems for our ports, as well as railways.

"Today, we have a train command system that is operated via satellite, which provides us with better safety and fewer accidents. We have also been working with neighboring countries that are major users of our infrastructure and ports. We are planning — together with a Mozambican electricity company — to use the electric rail system instead of diesel, which would have a huge positive economic impact.

"We are planning on increasing the line capacity of the railways, studying new technologies and are also thinking about building new lines, in addition to improving what already exists and training a skilled workforce — this is essential for us to achieve our goals."

The industry expert and electrical engineer believes Japanese companies are well-positioned to shape the future of Mozambique's transport and logistics networks and operations. In return, they will benefit from access to precious raw materials and fast-growing markets in Africa.

"Mozambique has high potential in terms of minerals and agriculture," he added. "Today, we have not yet begun to exploit even a fifth of our agricultural capacity. The world will need more and more food in the future as the world's population is increasing, especially in Asia, and we can be a great market and supplier to Asian markets in terms of agriculture and raw materials."

Produced by Global Insight

OUR MISSION
To develop the rail and port system to render it modern, efficient, competitive and market oriented.

OUR VISION
To become a company of reference and the best logistical option through the quality of our services and relationships.

OUR BUSINESS

- Run port and rail operations;
- Provide passenger and commodities transportation;
- Provide specialized rail and port training.

FOR MORE INFO www.cfm.co.mz

Showcase power project to boost energy security for many millions

With the countdown to building the \$4.5 billion Mphanda Nkuwa Hydro Power Project well underway, detailed construction and investment arrangements are being structured

On a continent rich in natural resources awaiting the right development venture, the \$4.5 billion Mphanda Nkuwa Hydro Power Project in Mozambique is poised to blaze a trail for other major renewables projects.

Comprising a state-of-the-art hydroelectric plant on the famous Zambezi River in the Marara District of Tete province, the 1,500-megawatt facility will be built between the Cahora Bassa Dam and the city of Tete. The project will also include a modern transmission system featuring a 1,300-km high-voltage transmission line between Cataxa, Tete province, and Maputo. It is due to be completed in 2031, around five years after its construction is scheduled to start.

As well as having priority status in the National Electricity Master Plan 2018–2043, the project has been designated a priority investment for the Southern Africa Power Pool Plan. With the support of local, regional and international partners, the ambitious development will not only boost energy security for Mozambique and its neighbors, but enhance private-sector participation on a competitive basis in both infrastructure

development and regional energy trading. "Mozambique's NEMP explicitly illustrates a substantial contribution of renewable power in which hydro plays a significant role in the total energy mix, exalting the huge renewable natural energy resources available, enabling Mozambique to play a leading role

'Mphanda Nkuwa will be a critical investment for Mozambique to deliver and contribute to a successful regional energy transition and decarbonization.'

Carlos Yum, Managing Director
Mphanda Nkuwa Hydro Power Project

in the regional energy transition and green industrialization," stated Mphanda Nkuwa Hydro Power Project Managing Director Carlos Yum.

"Mphanda Nkuwa's 1,500 MW will be a critical investment for Mozambique to deliver and contribute to a successful regional

energy transition and decarbonization. Realization of large-scale hydropower generation will actively support envisaged large-scale roll-out of other renewable energy technologies such as solar and wind by providing system-balancing services. On the same energy transition path, it will be important to promote competitive and long-term investments in high-voltage transmission infrastructure such as 'green corridors,' currently being promoted by the World Bank and regional infrastructure integration and industrialization, promoted by the African Development Bank," he added.

In May 2022, Yum traveled to Ghana and signed a high-profile agreement with the ADB for the latter to provide advisory services to the massive project. "The partnership with the ADB further strengthens the capacity of our implementing agency to develop the Mphanda Nkuwa project," he said during a ceremony to mark the occasion.

"The ADB will ensure that world-class environmental, social and governance and associated standards are adhered to during the development, and that the project is attractive to reputable developers, financiers and



Carlos Yum
Managing Director,
Mphanda Nkuwa Hydro Power Project

investors to ensure competitive and low-cost power for Mozambique and the region."

According to the senior executive, the project is the best-cost energy supply solution on a comparative basis. As the least costly solution, it will generate competitive electricity and the lowest blended costs for end users, including industrial ones, meaning it will promote medium- and large-scale green industrialization both nationally and abroad. "The project is also very important for creating medium- and long-term structural impacts," Yum added. "It is an asset which generates sustainable social, economic and financial benefits, during at least 60 years of operation if the assets are well-maintained. "Mphanda Nkuwa will generate electricity

sufficient to meet the needs of more than 10 million households and will provide renewable energy for the electrification and industrialization of the country, as well as export the surplus power, thus capitalizing on alleviating the huge regional power deficit of around 6,000 MW, and capture important foreign currency revenues."

Creating employment, not just energy

The Mphanda Nkuwa Hydro Power Project will create thousands of jobs during its multiple phases of development, construction and operation for at least six decades. The construction work alone will create an estimated 7,000 direct jobs, of which at least 90% will be for Mozambicans, especially young people.

"During its operation for the concession period of 30 years, extendable for an extra 10 years, there will be an estimated 3,000 permanent, quality, new jobs created," Yum revealed. "The project will also generate revenues for the government from tax, concession fees directly payable by the project and indirectly from small and midsize enterprises of new businesses established through the supply of additional electricity capacity.

"In 2022, Mozambique had almost 2,800 MW of installed power capacity, 78% of which came from water resources. In 2031, the forecasts illustrate more than twice this installed capacity will be online, with electric-

ity from hydro sources remaining the principal source."

As an engineer with decades of industry knowledge under his belt, Yum is excited about the important strategic investment's impact on Mozambique's socioeconomic development story through the addition of such significant power-generation capacity. "There is no way this project can fail," he continued. "I'm very optimistic that Mphanda Nkuwa will occupy its space in the market with merit. Mozambique is blessed with vast quantities of natural energy resources, both renewable and nonrenewable, and we owe it to our people to put this to productive use.

"The country is geographically well-located and its energy systems are well-interconnected with the regional market. The current legislative and regulatory framework is conducive for foreign direct investment, which has already enabled substantial public and private capital to flow into Mozambique. The institutional framework is also well-established. Going forward, the government is working toward further improving the legislative and regulatory framework. Together with the favorable and enabling climate and legislation investment framework, combined with the existing track record in structuring similar types of projects, Mozambique is a propitious country for FDI in the energy sector and elsewhere," Yum added.

MphandaNkuwa Hidroeléctrica
www.youtube.com/@gmnk6306