



Business Opportunities in Tanzania's Power Sector

In 2011, the United Republic of Tanzania was selected as one of four U.S. Government Partnership for Growth countries. This designation focuses support and private sector engagement efforts from across the U.S. Government on key growth constraints. One year later in December 2012, MCC selected Tanzania as eligible to develop a compact. The Government of Tanzania (GoT) and MCC are now in the process of developing a compact focused on one of these key constraints, the limited availability of reliable and affordable electric power.¹

The GoT and MCC are currently refining initial proposals for the compact, which they aim to sign in 2015. Once the compact enters into force (usually within one year after signing), it will continue for five years. Projects currently under consideration include:

- ★ Electric power sector reform including implementation of the *Energy Supply Industry Reform Strategy and Roadmap*, which proposes future unbundling of the Tanzania Electric Supply Co. Ltd. (TANESCO), the vertically integrated public electric utility that serves the Tanzanian mainland. The strategy calls for the unbundling of generation from the utility by 2017, and the further unbundling of transmission and distribution by 2020;
- ★ Supporting implementation of operational efficiencies and capacity building in TANESCO and the Zanzibar Electricity Company (ZECO) to improve cost effective service delivery. ZECO is considering options for private sector participation;

Tanzania at a Glance



Population: 49.3 million
GDP Annual Growth: 7%
GNI Per Capita, PPP: \$630
Net FDI Inflows: \$1.9 billion
Population Growth Rate: 2.8%
Population Below \$1.25/day: 67.9%
Source: World Bank 2013

Perspectives on Tanzania's First MCC Compact

"Through the leadership of the Tanzanian government, we see a steady commitment to reforming policies and institutions for sustainability. We see a growing willingness to create the enabling conditions for more and more private companies and entrepreneurs to be the engines of growth and job creation."

—Mr. Daniel Yohannes, MCC CEO 2009–2014

"Having electricity at Mkoka [due to investments made through MCC's first compact] you can now process maize and sell flour to earn more money instead of selling unprocessed or maize."

—H.E Dr. Kikwete, President of Tanzania, 2005–Present

"[Since the installation of the undersea cable through MCC's first compact] the problem of power rationing in Zanzibar is now consigned to the dustbin of history."

—H.E Dr. Ali Mohamed Shein, President of Zanzibar, 2010–Present

¹ For more detail on the constraints analysis see: <http://www.tzdp.org/tz/dpg-website/sector-groups/cluster-1/private-sector-trade/documents-library/economic-analysis-of-investment-environment.html>

- ★ Expanding the transmission and distribution network to increase access to affordable, reliable electricity;
- ★ Preparation of studies and possible viability gap funding necessary to support public tender of green-field generation facilities; and
- ★ Grant facilities to incentivize private investment in key areas such as demand-side management and energy efficiency and/or productive uses of electricity.

Why Invest in Tanzania?

Tanzania, with its large and growing domestic population, strategic location, abundance of natural resources, and internal political stability, offers long-term investment opportunity.

- ★ Tanzania has a relatively young population of roughly 49 million people, making it one of the largest countries, by population, in East Africa.
- ★ Tanzania, which borders the Indian Ocean, is a natural trading gateway for five countries surrounding it—Democratic Republic of Congo, Rwanda, Burundi, Uganda, and Zambia.
- ★ The country has vast natural riches: minerals in the form of gold, diamonds, copper, coal; recent large discoveries of natural gas both onshore and within its territorial waters; and diverse wildlife and vast tracts of beautiful natural scenery, including national parks and sandy beaches.
- ★ The country has enjoyed long periods of political stability. Since the 1964 union of Tanganyika and Zanzibar, the country has been relatively peaceful, and its political leaders have all come to power through an electoral process.
- ★ Economic growth in Tanzania has averaged 6.9 percent over the last decade, and increased investment in power and other critical infrastructure will help Tanzania continue on this trajectory.

Tanzania is Primed for Power Investments

The Government of Tanzania has plans to significantly expand the power sector over the next 10 years. The current status of the sector and some future plans include:

Generation: Total installed generating capacity is approximately 1310 MW, approximately 562 MW of which is sourced from hydro facilities. This includes:

- ★ Installed capacity on the main grid of 1226.24 MW, including 561.84 MW (45.8 percent) from hydro sources and 664 MW (62.6 percent) from thermal sources, including 441 MW using gas and 223 MW using fuel oil. The fuel oil plants are expected to be almost entirely decommissioned by the end of 2015.
- ★ Total capacity of off-grid stations of 82.3 MW.

Current peak domestic demand is 935 MW. The Government of Tanzania's *Energy Supply Industry Reform Strategy and Roadmap* calls for 10,000 MW by 2025, or additional capacity of 1,000 MW each year for the next 10 years.

Transmission and Distribution: Tanzania's current transmission system totals 4,867 km and is comprised of 2,732 km of 220 kV lines, 1,556 km of 132 kV lines and 579 km of 66 kV lines. The distribution system is comprised of 17,021 km of 33 kV lines, 5,375 km of 11 kV lines, 34,513 km of LV, and 11,124 distribution transformers. As noted earlier, the MCC compact is considering a significant investment in the

expansion of the transmission and distribution system. A map of the system may be found at the end of this document.

Tanzania currently provides the director general of the East African Power Pool (EAPP), which includes Tanzania, Kenya, Ethiopia, Burundi, Rwanda, and Uganda. Tanzania is the only country in EAPP that is also part of the Southern Africa Power Pool, giving it access to the power demand and infrastructure for a large portion of the continent. The Government of Tanzania is committed to the construction of the transmission interconnections necessary to expand opportunities for and from regional electricity markets.

The Ministry of Energy and Minerals anticipates further diversifying the balance of its electric power fuel source toward, in priority, natural gas, coal, hydro, geothermal, and renewables, especially solar and wind. Tanzania currently distributes 103 million cubic feet of natural gas domestically and expects a significant increase in the near future as proven reserves move into production. Some of the current sources being considered include:

Energy Source	Potential	Developed To Power
Natural Gas: Songo Songo, Mnazi Bay, and deep off-shore	53.28 trillion cubic feet discovered	441 MW
Coal: Kiwira, Mchuchuma, Ngaka, Rukwa, and around Lake Victoria	Estimated 5-7 billion tons potential and 1 million tons proven reserve	None
Geothermal: 58 potential sites including: Songwe (Mbeya), Luhoi (Rufiji), Manyara, Lake Natron, and Kisasi	650 MW of electricity	None
Hydro: Various potential sites	4.7 GW of electricity	562 MW
Wind: Makambako, Singida, Litembe (Mtwara), Mkumbara (Tanga), Gomvu (Dar), Karatu (Manyara), and Mafia	Average wind speed 5-8m/s	None
Biomass: woodfuel and agricultural waste	Potential to generate 500 MW	35 MW from bagasse and woody residue
Solar: Several sites	Average daily solar isolation of 4.6/kWh/m ²	About 6 MW

Source: TANESCO, January 31, 2014.

Opportunities for Investment and Engagement in Developing Tanzania's Compact

MCC's planned compact with the Government of Tanzania will present a number of opportunities for companies, including investments, partnerships and compact procurements. Consultation with the private sector is also ongoing throughout compact development.

Some of the opportunities for companies to consider include:

1. Investment in independent power producers and public-private partnerships with TANESCO, ZECO and the broader Tanzania energy sector. The Government of Tanzania is planning a number of solicitations for large natural gas plants, such as Mkuranga, with an expected capacity of around 250 MW, and smaller scale renewable plants, such as Singida wind, and geothermal development at Ngozi near Mbeya, Lake Natron, Morogoro, and Utete, with a total expected capacity of about 200 MW.
2. Direct investment in private sector participation to be considered in support of the management and operations of ZECO.

3. Investments in light industry and agro-processing that take advantage of reliable and affordable power for supplying the vast regional market, such as the agriculturally rich Southern Africa Growth Corridor of Tanzania region or mining opportunities in the northwest near Mwanza.
4. Investments throughout the country in other small business development created through new access to electricity (*e.g.*, milling, cold storage, frozen food, and small appliance retail)
5. Investments consistent with the pending Government of Tanzania *Gas Sector Master Plan* in the downstream gas sector for recent discoveries, pipeline and processing developments such as petrochemicals, fertilizer production, plastics, and household consumption.
6. Risk-sharing through possible inclusion of compact-funded competitive grants, incentive grants and/or other financing mechanisms.
7. Compact-funded procurement opportunities in areas such as utility management information systems, provision of training and technical assistance to utility staff and design and installation of transmission and distribution equipment such as poles, wires and meters.

While the Government of Tanzania and MCC will not be able to accommodate all suggestions, feedback on any of the above as well as additional recommendations are invited and welcomed at any time.

For additional information:

MCC

Scott Alexander, MCC Resident Country Director, Dar es Salaam, Tanzania alexanderms@mcc.gov

Himesh Dhungel, Practice Lead/Senior Director, Energy, Washington, D.C. dhungelh@mcc.gov

Courtenay Engelke, Senior Director, Finance, Investment and Trade, Washington, D.C. engelkecd@mcc.gov

Procurement information

MCC procurement: <http://www.mcc.gov/pages/business/compactprocurements>

Annex 1: Tanzania Electricity Transmission and Distribution Map



Annex 2: Tanzania FY15 Scorecard

Tanzania FY15

Population: 49,253,000

GNI/Cap: \$630 (LIC)

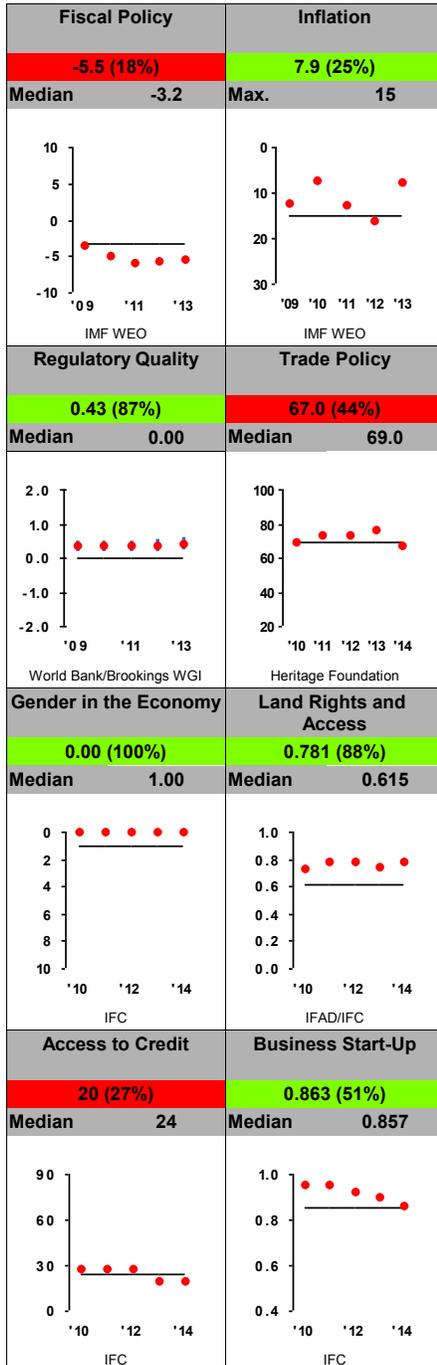
Control of Corruption

Democratic Rights

Pass Half Overall

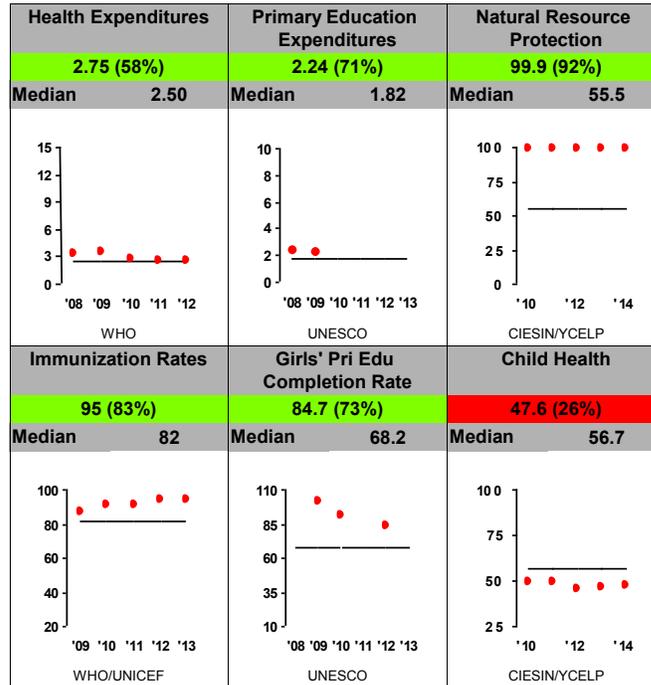


Economic Freedom



For more information regarding the Millennium Challenge Account Selection Process and these indicators, please consult MCC's website: www.mcc.gov/selection

Investing in People



Ruling Justly

