



Business Opportunities in Ghana's Power Sector

The Ghana Power Compact between the Millennium Challenge Corporation and the Government of Ghana (GoG) was signed in August 2014, and is expected to enter into force in mid-2015.¹ This compact, which includes power infrastructure as well as significant policy and institutional reforms, is the largest U.S. Government-funded transaction to date in support of Power Africa. It is laying the groundwork to increase the operational and financial sustainability of Ghana's power sector, while creating a climate that will attract greater private sector investments.

Companies can explore opportunities presented by the MCC Ghana Power Compact through:

- ★ Private sector participation in the operation and management of electricity distribution companies.
- ★ Investments in independent electricity generation including thermal and renewable plants to complement compact investments.
- ★ Investments in the gas sector, which will benefit from MCC support to improve market-orientation of the sector and reliability of the gas supply for power generation.
- ★ Compact procurement opportunities for goods and services.

Why Invest in the Ghana Power Sector

Annual GDP growth in Ghana has been about 7.5 percent over the last decade, making it one of the fastest growing countries in the world.

- ★ Ghana is committed to attaining financial viability for its two primary electricity distribution utilities and has implemented reforms and policies to improve the environment in the sector for private investment.
- ★ Unmet demand for electrification, together with a strengthened power utility and regulatory framework for private sector participation as a result of the MCC compact, make Ghana an attractive location.

Ghana at a Glance



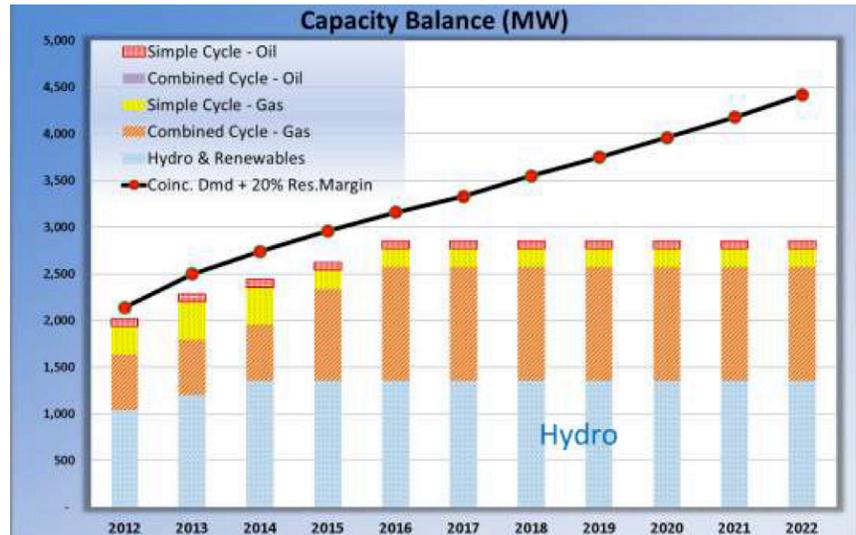
Population: 25.9 million
GDP Annual Growth: 7%
GNI Per Capita, PPP: \$3,880
Net FDI Inflows: \$3.2 billion
Population Growth Rate: 2%
Population Below \$1.25/day: 29%
Source: World Bank WDI 2013

Ghana was selected by the U.S. Government to participate in Partnership for Growth (PFG), which focuses support and private sector engagement efforts from across the U.S. Government on key constraints to growth in developing countries. In Ghana, PFG objectives include strengthening the power sector and increasing access to credit.

¹ Compact signing commits funds to a country for purposes outlined in the compact; entry into force initiates a five-year implementation period for the compact program.

Ghana is Primed for Power Investments—Demand is Outstripping Supply

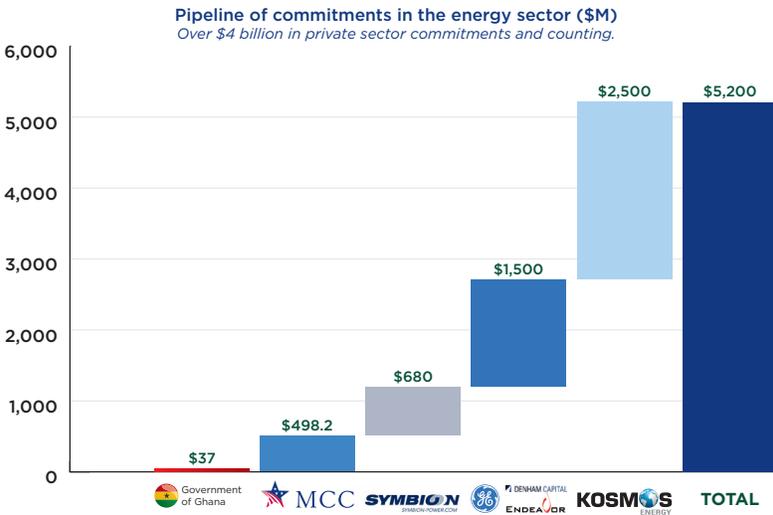
While the GoG has made some progress in reforming the energy sector in the past two decades, the gradual pace of change can no longer keep up with rapid urbanization, growing demand for power and the GoG’s aggressive rural electrification program. There is a substantial and growing gap between demand and available supply, plus an appropriate reserve margin. The GoG specifically chose to address its challenge with inadequate and unreliable supply of electricity under the MCC compact because of the link among prolonged periods of load shedding and frequent outages, inefficient and unprofitable business operations and adverse quality of life for Ghanaians.



Investment Opportunities

The five year, \$498.2 million Ghana Power Compact will seek to reduce poverty and open the Ghanaian energy market to private investment by supporting the transformation of Ghana’s power sector. The compact seeks to create a financially viable power sector that will meet the current and future needs of households and businesses, as well as create credible off-takers for fuel supply and generated electricity.

Ghana Power Compact: Catalyzing Private Investment



A private sector stakeholder group was consulted throughout compact development. This stakeholder group consisted of gas and power generation and distribution companies, including independent power producers, international banks and financial institutions, equipment suppliers, utility managers, and international oil companies. The stakeholder group identified the following key constraints to investment that the compact seeks to address:

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- ★ Existence of a credible off-taker;
- ★ Provision of reliable gas supply;
- ★ Development of a clear, robust independent power producer framework.

The compact investment will focus on distribution, power generation and gas sector investments and will be implemented through **six specific components**. These will address the identified constraints and provide the private sector with the needed platform to engage in the Ghanaian power market.

Compact Components

1. **Electricity Company of Ghana (ECG) Financial and Operational Turnaround:** Improve the governance and management of ECG by bringing in a private sector operator and building infrastructure and foundational investments designed to reduce losses and improve service quality.
2. **Power Generation Sector Improvement:** Alleviate major constraints to investment in generation by improving the country's gas sector, developing an independent power producer framework that addresses integrated generation, transmission, distribution, and demand-side management.
3. **Energy Efficiency and Demand-Side Management:** Develop and enforce energy-efficient standards, build capacity for improved energy auditing, implement a public-awareness campaign to promote energy efficiency, and launch a pilot project to introduce distributed applications such as solar photovoltaic backup power for lighting and electronics, off-grid solar systems and grid-connected solar systems.
4. **Access to Energy:** Test the most cost-effective approaches to addressing the constraints faced by micro, small and medium enterprises in obtaining safe and legal access to electricity in selected markets and economic enclaves within the ECG and Northern Electric Distribution Company (NEDCo) target region. The project will also explore innovative approaches with private and public institutions to leverage additional resources in achieving cost-effective interventions.
5. **NEDCo Financial and Operational Turnaround:** Provide technical assistance to improve the financial and commercial operations of NEDCo, a distribution utility in the northern regions of the country, and invest in infrastructure to improve the quality and reach of service.
6. **Regulatory Strengthening and Capacity Building:** Improve the regulatory monitoring and independent verification of sector performance, and improve the ratemaking process.

MCC and the GoG encourage the private sector to co-invest or build upon these investments in order to improve energy delivery, increase generation and allow for wider access to power to meet Ghana's growing power needs.

Gaps and Opportunities to Enter the Market

The compact components are laying the foundation and creating a number of opportunities for private sector investment, particularly in power generation and the gas sector. Already, the pipeline of commitments in the energy sector has exceeded \$4.6 billion.

The work creating the enabling environment for these investments includes:

Power Generation Investment

The GoG is committed to increasing its generation capacity through the development of independent power producers. Ghana is already seeing commitments from major independent power producers as shown in the chart on page 2. Through targeted compact investments, there will continue to be room

for new investors to enter the market. Beyond supporting ECG's transformation into a credible off-taker, MCC will specifically support independent power producer development through:

- ★ Developing a least-cost integrated resource plan (IRP);
- ★ Designing and providing core documents for independent power producer procurement processes such as agreements for power purchase, government support, escrow, and fuel supply; and
- ★ Providing strategic advisors to lead the process of sector planning, oversee the IRP development and serve as transaction advisors on the first competitive independent power producer transaction(s) to include renewable energy sources.

Gas Sector Investment

The compact will capitalize on the investments made in cleaner, more cost-effective energy by supporting the institutionalization, commercialization and securitization of Ghana's natural gas sector. MCC will support private investment through:

- ★ **"Gas to Power" Value Chain:** The compact will provide essential technical assistance to establish a sustainable, market-oriented gas sector in Ghana so that gas can serve as the principal fuel source to meet growing demand for electricity at the lowest cost. This will be achieved by:
 - * Embedding strategic advisors in the GoG to lead the process of gas-sector structuring and policy development and managing short-term capacity building activities; and
 - * Capacity building for the GoG to develop work products arising from the Gas Action Plan and the Gas Sector Master Plan, each with applicable training to Ghanaian stakeholders.
- ★ **Facilitate Liquefied Natural Gas Development:** This investment is intended to position the GoG to secure liquefied natural gas (LNG) supply in the short- to medium-term to support the diversification of fuel for power generation. This will be achieved by:
 - * Providing advisory support and capacity building to the GoG to complement the technical engineering feasibility and design studies already provided under compact funding mechanisms. This, in turn, will provide the GoG with the appropriate financial and technical analyses required to attract funding from the private sector or other donors for LNG development.

Ghana Power Compact Procurement Opportunities

Between now and the end of the compact, nearly half a billion dollars of energy sector infrastructure and services will have been funded under the compact. These procurement opportunities will be made available through the GoG's compact implementing entity, the Millennium Development Authority (MiDA), primarily in the first three years of the compact. MCC encourages the private sector to capitalize on these opportunities.

Procurement notices and plans are posted by MiDA's website at <http://mida.gov.gh>. As a preview, opportunities will include:

- ★ *ECG and NEDCo Financial and Operational Turnaround:* GIS-based distribution management; service connections standards creation; strengthening loss control program; metering; low voltage bifurcation and network improvement; outage management system.
- ★ *Regulatory Strengthening:* Capacity building; regulatory partnership program; tariff review and tariff setting.
- ★ *Power Sector Improvement Project:* Technical assistance to operationalize "gas to power" plan; technical assistance to facilitate LNG development by strengthening the independent power producer framework.
- ★ *Access to Electricity:* Technical assistance and infrastructure to improve electricity supply to micro-, small- and medium sized enterprises; improving service delivery; strengthening institutional coordination and partnerships.

For additional information:

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Procurement information

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

Ghana's MCC Compact

MCC compact page: <http://www.mcc.gov/pages/countries/program/ghana-power-compact>

MiDA website: <http://mida.gov.gh/site/>

Annex 1: Ghana FY15 Scorecard

Ghana FY15

Population: 25,905,000

GNI/Cap: \$1,760 (LIC)

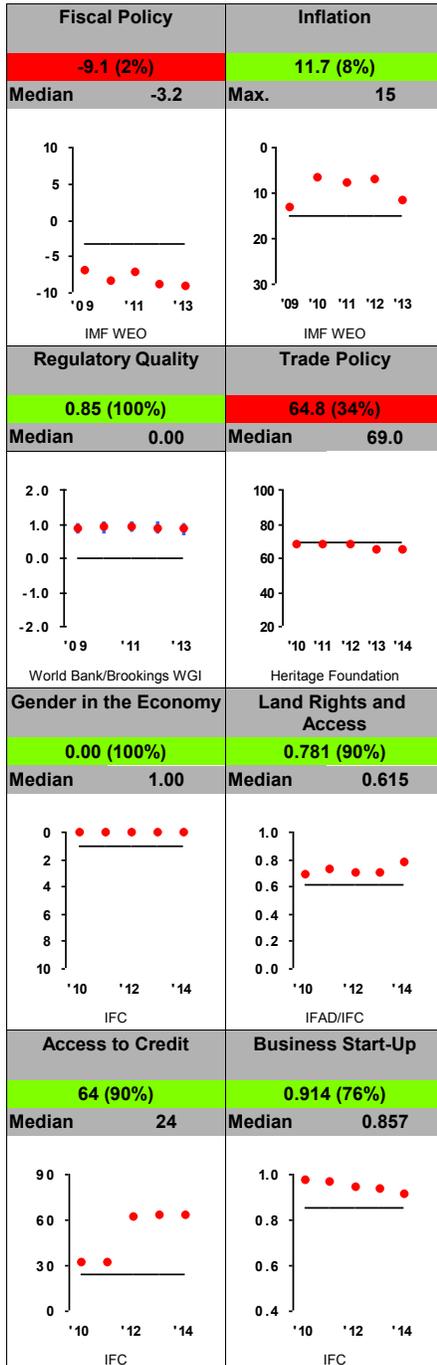
Control of Corruption

Democratic Rights

Pass Half Overall

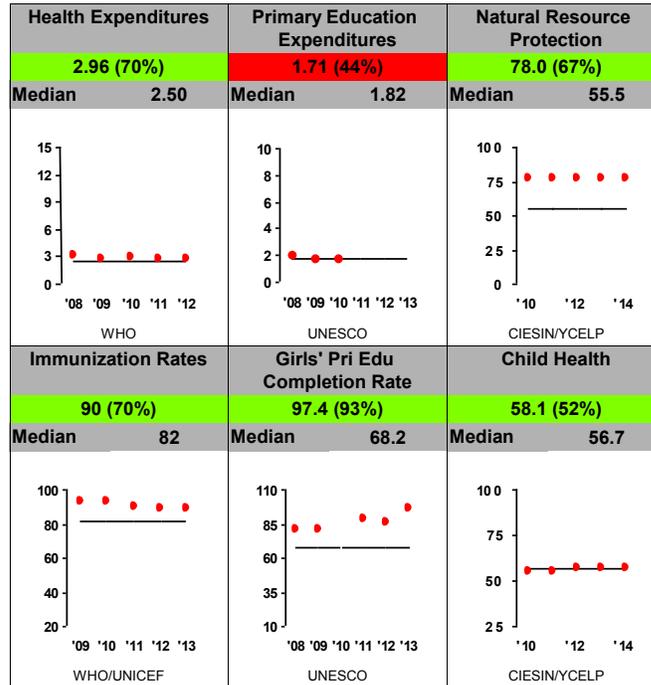


Economic Freedom



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

