

CONGRESSIONAL NOTIFICATION TRANSMITTAL SHEET

We wish to inform you that the Millennium Challenge Corporation intends to obligate up to \$8,900,000 to further the development of a Millennium Challenge Compact with the Government of the Republic of Benin and to negotiate the Compact with the Government of Benin.

In addition to the enclosed notification, we have included supplemental information regarding objectives and mechanisms to be used for negotiation of this Compact, as well as a summary of the planned activities to further compact development and prepare for compact implementation.

If you or your staff would like to arrange a meeting to discuss the proposed negotiations with the Government of Benin, please contact me or Jim Mazzarella at (202) 521-3850. The attached notification is being sent to the Congress on April 9, 2015. The obligation of 609(g) funds may be incurred and negotiations with Benin may commence on or after 15 days from the date of this notification.

Sincerely,

/s/

Paul Weinberger Vice President Congressional and Public Affairs

Enclosure: As stated

MILLENNIUM CHALLENGE CORPORATION CONGRESSIONAL NOTIFICATION

April 9, 2015

PROGRAM:

Eligible Countries

APPROPRIATIONS CATEGORY:

FY 2015 Program Funds

OBLIGATION AMOUNT:

\$8,900,000

Pursuant to the heading "Millennium Challenge Corporation" of the Department of State, Foreign Operations, and Related Programs Appropriations Act, 2010, the same heading of similar acts for fiscal years 2011 through 2015, and section 610(a) of the Millennium Challenge Act of 2003, as amended (the "MCA Act"), this notification is (1) to advise you that the Millennium Challenge Corporation ("MCC") intends to start negotiations with the Government of Benin for a Millennium Challenge Compact ("Compact") and (2) to initiate the 15-day consultation period before the start of negotiations.

In addition, pursuant to section 7015(c) of the Department of State, Foreign Operations, and Related Programs Appropriations Act, 2015, this notification is to advise you that MCC intends to obligate up to \$8,900,000 under section 609(g) of the MCA Act, for the purpose of furthering the development of a Compact with the Government of the Republic of Benin. With these 609(g) funds, MCC plans to finance detailed engineering, environmental, and resettlement work, along with stand-up of the compact accountable entity and baseline monitoring and evaluation studies. The planned activities reflect MCC's commitment to data-driven decision-making and thorough project and implementation preparation in order to reduce implementation risk, increase budget accuracy, and achieve results.

SUPPLEMENTAL INFORMATION - PROPOSED BENIN COMPACT

Overview

The proposal from the Republic of Benin for an MCC compact seeks to address lack of electricity infrastructure, a binding constraint to economic growth, through strategic investments in power generation and distribution infrastructure and off-grid electrification accompanied by far-reaching reforms to the institutions and regulation of Benin's electric power sector as well as to the governance, administration, and operations of the country's electric utility.

Background

Benin was selected as eligible to develop a compact by MCC's Board of Directors in fiscal year ("FY") 2012. In FY 2014, Benin failed the Control of Corruption indicator and the MCC Board limited the resources available to help further develop the compact. Benin passed the FY 2015 scorecard by passing twelve of twenty indicators, including Control of Corruption, and the Board reinstated eligibility and authorized resumption of all compact development activities.

An analysis of constraints to economic growth undertaken by the Government of Benin and MCC identified lack of electricity infrastructure and an inadequate business environment as the two binding constraints to economic growth in Benin. After lengthy examination of a program focused on improving the business environment and supporting infrastructure for agribusiness, it was decided that the power sector should be the focus of the proposed compact.

Benin produces only one percent of the electricity it consumes and relies heavily on imports from neighboring countries (primarily Nigeria and Ghana) which themselves are experiencing power shortfalls and hence are unable to reliably deliver electricity. At the same time, rapidly growing demand for power – at six percent per year – has placed stresses on Benin's national electrical grid, which suffers from daily power outages. As a result, unreliable electricity supply tops nearly every survey of problems facing businesses, and, without additional power generation, Benin cannot fully capitalize on its geographic role as a gateway for West Africa and Africa's largest market - Nigeria. Compounding the problem are consumer tariffs that are not cost-reflective, leading to severe resource shortages for new investment in generation, extension of the network, or operations and maintenance of the existing network. As a consequence, the network is poorly maintained and administered, with 22 percent technical and commercial losses, frequent outages, and poor quality service.

As a result of resource and capacity deficits, as well as the general poverty of the country (\$1,600 median annual income per capita as measured by purchasing power parity), only one-third of Benin's population has access to electricity, with extraordinary disparities between rural and urban areas; over half of urban residents have access to electricity, while only 5.5 percent of rural inhabitants do. Because of the low levels of access, electricity consumption in Benin is below the average for Africa's low-income countries at 110 kWh/capita per year – equivalent to only 0.01 percent of the average for middle-income economies.

Notwithstanding these challenges, the government has demonstrated political will at the highest levels to reform the sector and use the potential MCC compact as a lever to unlocking private investment in generation to increase supply and improve service and access across the country. To achieve this ambitious goal, MCC has advanced an aggressive and far-reaching reform agenda focused on putting into place the legal, regulatory, and institutional framework required for a financially viable and operationally effective sector. Already, at MCC's request, the government has established a professional electricity regulatory body and begun making legal changes to clarify responsibilities for power generation. After the compact is negotiated, and if approved, MCC expects to help Benin put into place cost-reflective tariffs; an effective regulatory system; an independent, capable and more commercially oriented utility, and a clear and transparent framework for private sector participation in electricity generation.

In sum, the Government of Benin has been a strong partner throughout more than three years of compact development and has demonstrated political will to improve its policy performance on the MCC scorecard, sustain projects and continue reforms from the first compact, as well as make headway on tough policy and institutional reforms in the power sector.

Program Overview and Budget

The proposed Benin compact will support up to 80 megawatts ("MW") of new or rehabilitated electric generation capacity, including MCC's largest investment in on-grid solar power to date, improved electricity distribution infrastructure to reduce technical and commercial losses, a significant off-grid electrification effort to increase access to electricity for poor households, and policy and institutional support needed to spur private investment in power generation and ensure a sustainable and financially viable electricity sector. The anticipated budget for the compact is up to \$375 million, not including a required contribution by the Government of Benin equal to 7.5 percent (of the U.S. contribution).

PRELIMINARY BENIN COMPACT BUDGET	
ELECTRICITY GENERATION PROJECT	121
ELECTRICITY DISTRIBUTION PROJECT	126
OFF-GRID ELECTRICITY ACCESS PROJECT	47
POLICY REFORM & INSTITUTIONAL	
STRENGTHENING PROJECT	40
ADMIN/M&E	41
TOTAL COMPACT NOTIONAL BUDGET	375
COUNTRY CONTRIBUTION	28
TOTAL PROGRAM BUDGET	403

The expected compact budget comprises an integrated set of activities that are expected to lead to far-reaching reforms to Benin's electricity sector and result in expanded power availability that will spur production and productivity by businesses, greater economic opportunities for poor households, and improved quality and reliability of public and social services. These outcomes drive the program logic and underpin the compact's economic model.

In order to better understand electricity markets in Benin, MCC conducted a first of its kind survey of over 5,100 households and business in partnership with Benin's national statistics institute. The nationally representative survey assessed the willingness to pay for electricity by households and businesses, along with their behavior towards and perceptions regarding electricity.

Economic Rates of Return

The data from the survey forms the backbone of the compact's economic model, which utilizes a consumer surplus approach to assessing the potential benefits of the compact. The data also helped the team to understand consumer behavior within electricity markets, including the presence of large secondary markets accounting for nearly one-third of all household connections nationwide, in which neighbors sell to neighbors at - in some cases - twice the price charged by the utility. The large secondary market is a function of the high cost of and delays in connecting to the grid.

Informed by the survey, the program logic, and MCC's technical analysis, the economic rate of return ("ERR") for the compact is 12 percent. Given that the proposed program would fund an interdependent network in a single sector, the economic model produces an ERR for the entire program, rather than for individual projects.¹

Anticipated Project and Activities

The projects and activities to be negotiated with Benin are:

Electricity Generation Project

MCC's proposed investment would dramatically increase the amount of power produced in Benin – equivalent in capacity to one-third of the country's current peak demand – while assisting the country to decrease its reliance on energy imports through the following activities:

1. **Photovoltaic Generation Activity:** A feasibility study identified six sites to install solar photovoltaic power plants that can serve local demand and feed directly into Benin's electricity network. Four sites were selected for the proposed compact investment, for a total of 45 MW of new solar generation in Benin.

- 1. Additional 45 MW of generating capacity nationwide.
- 2. Introduction of utility-scale photovoltaic power in Benin.
- 3. Opportunity to spin off one or more sites as an independent power producer ("IPP") to generate funding for additional investment.
- 4. Renewable, carbon-free source of electricity.
- 5. Low maintenance costs, proven technology.

¹ The program ERR of 12 percent does not include costs relating to the proposed off-grid project (described herein), since the benefits for that project have not yet been quantified. MCC will ensure that individual activities funded within the project yield a return of 10 percent or greater. Inclusion of the costs of the off-grid project still produce an ERR that is above the hurdle rate of 10 percent.

6. **Thermal Generation Activity:** A total of 34 MW of small thermal generation units in three locations are proposed for rehabilitation to complement the solar plants cited above by providing electric power to satisfy nighttime peak demand. By rehabilitating the units they will also be made more efficient, yielding both economic and environmental benefits.

Opportunities

- 1. Additional 34 MW of generating capacity nationwide.
- 2. Pairing the units at two of three sites (Parakou and Natitingou) with proposed solar photovoltaic generation to provide those communities with 24 hour power. Both sites are agricultural aggregation centers and important towns in poor areas of central and northern Benin, respectively.
- 3. The units in Benin's capital (Porto Novo) would add additional generating capacity close to peak load centers in the south of the country.
- 4. Rehabilitation of the three generation units will permit the remediation of potential soil contamination.
- 5. Hydroelectric Generation Activity: This activity would rehabilitate and increase the capacity of a small (1 MW) run-of-the-river existing hydropower facility that provides power in one of the poorest and most remote areas of Benin.

Opportunities

- 1. One MW of additional generating capacity in one of the poorest areas of Benin at the end of the national distribution grid.
- 2. Low-cost generating capacity to complement solar installations.
- 3. Rehabilitation provides the opportunity to address potentially negative ecosystem effects on site.

Electricity Distribution Project

If approved, this project will upgrade Benin's electricity distribution infrastructure to reduce losses, improve system reliability and reduce outages, and expand network capacity to accommodate rapidly growing demand.

1. Regional Grid Strengthening Activity: This activity would replace lines, upgrade substations, install new switchgear connections and build new substations where needed to complement investments in solar power generation in the cities of Natitingou, Parakou and Djougou. This activity would also build a new 63kV connection from Porto Novo to Akpakpa, and build a new substation repartition to improve network capacity and reliability in Benin's second largest city.

- **1.** Reduction of technical losses of electricity.
- 2. Increased voltage stability, reduced outages and greater network reliability.
- **3.** Increased capacity to accommodate future growth.
- 4. Network improvements to incorporate photovoltaic generation.

5. Cotonou Grid Strengthening Activity: This activity would improve reliability of the network in response to anticipated continued increase in demand through a variety of infrastructure projects identified as priorities by feasibility studies, including new switchgears, new substations, city network extension, and replacement of secondary neighbor-to-neighbor connections with direct connections to the grid.

Opportunities

- 1. Reduction of technical losses of electricity.
- 2. Greater voltage stability, reduced outages and greater network reliability.
- **3.** Up to 10,000 new connections for poor urban households.
- 4. Reduction in polychlorinated biphenyl ("PCB") contamination and the decommissioning of old equipment, such as transformers containing PCBs.
- 5. Increased network capacity to accommodate rising demand.
- 6. National Electricity Dispatch Activity: This activity would build a national distribution control (dispatch) center, a necessary requirement to accommodate the planned photovoltaic generation, to provide real-time network monitoring, control, and data collection.

Opportunities

- 1. More cost-effective and technically efficient load management and forecasting.
- 2. Greater reliability and stability of electricity supply.
- 3. Ability to integrate intermittent solar and other intermittent sources of power.

Off-grid Electricity Access Project

Two-thirds of Benin's population does not have access to electricity. This project would help address this gap by providing project financing for off-grid electricity solutions as well as assisting households to save money by using energy more cost-effectively.

1. Off-Grid Electricity Challenge Facility: The facility would finance solar and hybrid off-grid electrical solutions for communities, continuity of service for critical public infrastructure (such as water supply), and renewable and energy-efficient devices for individual families, including for the purpose of reducing women's time and labor burdens (e.g., household photovoltaic units). The facility would seek to leverage MCC's resources through partnerships with private companies, NGOs, communities or other entities that demonstrate viable off-grid, clean energy solutions for Benin. A facility manager will select the most promising partners based on a strict set of criteria, including that each proposal must meet an economic rate of return of ten percent or higher.

- 1. Expanded access to electricity for poor and unserved households.
- 2. Market opportunities for energy services firms.

3. **Energy Efficiency Activity:** This activity is directly complementary to the off-grid challenge facility by collecting market information on energy efficiency and household photovoltaic systems and disseminating that information to importers, retailers, government, businesses, and households to assist in building the market for quality products. The activity will be complemented by the development of standards and labels in the enabling environment for energy efficiency activity described below.

Opportunities

- 1. Expanded access to market information about energy-efficient appliances, photovoltaic systems, and other devices.
- 2. Reduction in the growth of electricity demand, yielding savings for households, businesses, and the government.
- 3. Increased market opportunities for energy services firms.

Policy Reform and Institutional Strengthening Project

- 1. Sector Policy, Regulation, and Institutional Support Activity: This activity will:
 - 1. Support Benin's newly created regulatory authority to conduct tariff studies and develop a rate-making and licensing framework.
 - 2. Provide institutional assistance to the Ministry of Energy's electricity directorate.
 - **3.** Contribute to tariff reform to support the financial viability of Benin's national electric utility as well as electricity access for the poor.
 - **4.** Put into place the policy and institutional framework required for off-grid electrification, including ownership, operations, tariffs, community engagement and technical standards.
 - **5.** Establish a legal and regulatory framework, standard forms of contract, a competitive solicitation process, transaction advisory services, and other elements necessary for private investment in power production.
 - 6. Introduce standards for energy-efficient household appliances, such as light bulbs, air conditioners, and refrigerators, and small solar photovoltaic devices, such as lamps and mobile phone chargers; develop a labeling and standards enforcement program, and collect and provide energy audits of public buildings and facilities to identify opportunities for energy savings.

- 1. Professional regulatory authority able to govern the sector.
- 2. Studies in place to inform the development of a tariff policy, plan, and implementation.
- 3. Framework for off-grid licensing and/or concessions.
- 4. Institutionalization of framework for private sector participation in Benin's power sector that could potentially lead to significant private investment in generating capacity to help meet the country's electricity needs.
- 5. Greater consumer knowledge of products available on market and quality standards, leading to market opportunities for energy services firms.

6. Utility Strengthening Activity: Benin's national electric utility ("SBEE") suffers from politicized decision-making, inadequate resources, frequent management turnover, and low employee technical capacity and morale. The compact will support governance reforms to ensure the operational independence of the utility alongside capacity strengthening through technical assistance, equipment, and training to improve the utility's core business functions as well as undertake financial restructuring to improve the balance sheet. Capacity strengthening will also include training and policy reforms to create a safe working environment with equal opportunities for men and women's professional advancement.

Opportunities

- 1. Potential for more professional and stable management and less political interference in operational decisions.
- 2. Greater capacity for preventive maintenance of SBEE assets.
- 3. Improved workplace health, safety, and environmental management.
- 4. Improved workplace morale and incentives.
- 5. Improved working environment for female employees.
- 6. Better information management, including for system assets, inventory, customer accounts, and internal controls.
- 7. Public Information and Education Acitivity: This activity would provide information, education, and communications to Benin's population, taking into account gender or rural/urban differences in purchasing power and access to information and technology. Topics will include energy efficiency, solar photovoltaic products for household use, and policy and institutional reforms (such as tariff changes) to improve consumer understanding of energy utilization and costs, which products are the most energy efficient (and therefore the least expensive to operate), and what electricity policy or service changes to expect. This activity is viewed as a necessary complement to the rest of the program, especially the energy efficiency and decentralized energy activities described above.

- 1. Greater public awareness of energy efficiency practices, products, and services.
- 2. Greater public awareness of potential changes to tariffs and/or electricity services.



SUPPLEMENTAL INFORMATION – 609(g) FUNDING

MCC-Approved 609(g) Activities

In order to facilitate the development and implementation of the proposed Benin compact, MCC has determined that funding is needed for:

- Detailed engineering designs, site-specific environmental impact assessments, and resettlement analysis for power generation and distribution infrastructure.
- Fiscal and procurement agents to support the immediate stand-up of the MCA-Benin accountable entity.
- Manager for the off-grid electricity activity to spur private sector investment, introduce innovative technologies, and increase access to electricity for the poor.
- Baseline data collection for monitoring and evaluation.
- Funding to ensure continuity of operations for the Government of Benin counterpart team through compact signing and for a six-month transition period thereafter until MCA staff have been recruited and mobilized.

The need for these resources prior to compact signing is a lesson learned from across MCC's portfolio regarding the importance of early and thorough project preparation and MCA stand-up in order to reduce risks during the five-year fixed implementation period.

Prior 609(g) Obligations

In June 2013, MCC submitted a Congressional Notification for \$5 million in section 609(g) funding to support technical analysis and project development of the Government of Benin proposals.

The \$5 million in previously approved section 609(g) funding was used for:

- Feasibility studies for power generation and distribution projects including preliminary environmental and social impact assessment.
- Preliminary resettlement analysis of proposed capital projects.
- Survey of willingness to pay for electrical power.
- Analysis of energy efficiency measures.
- Analysis of off-grid electricity policy and institutional issues.
- Studies for projects MCC will now not pursue under the energy-centric compact program, including roads.

Update on Benin 2006 Compact

Benin successfully implemented a \$307 million compact from 2006 to 2011 through the following four projects:

1. **The Access to Markets Project** expanded the Port of Cotonou, a key transit point for Benin, Burkina Faso, Niger and Nigeria. MCC's investment was conditioned on the Government of Benin competitively awarding the management of a new wharf funded by the compact to a private operator, which ultimately resulted in a 25-year concession that is expected to generate \$1.5 billion for the country. The International Finance Corporation and Infrastructure Journal recognized the wharf concession as a "top 40 public-private partnership" and with a "bronze" award among sub-Saharan African projects. The port was also awarded the gold prize of the International Association of Ports and Harbors Information Technology Award 2013 for systems modernization financed by the compact.

- 2. The Access to Land Project had mixed results. While certificates of rural landholding and title numbers fell significantly short of compact targets, the government continued titling after the compact ended, made significant titling progress in rural areas and passed a land code supported by the compact in January 2013, along with all necessary implementing decrees.
- 3. **The Access to Financial Services Project** finished in a largely satisfactory manner, including strengthening supervision of microfinance institutions and providing cost-sharing grants to support microfinance and entrepreneurship.
- 4. The Access to Justice Project made improvements to Benin's legal and judicial environment through reformed court processes and a new code of administrative procedure, the construction of five courts, training of judges and clerks, the establishment of a public legal information center, and the establishment of additional one-stop shops for business registration. Business registration efforts significantly reduced the number of days needed to register a business, while commercial dispute resolution efforts were less successful.

The Government of Benin has continued to pursue reforms begun during the first compact, and has dedicated \$4 million of country budget resources to fund a unit responsible for coordinating those reforms and developing the second compact.