



*Figure 1: A view of the Mt. Coffee Hydro Power Plant, downstream of the main spillway.*

## **After Doubling Electricity Access and Building a Data-Driven Road Maintenance System in Liberia, Millennium Challenge Compact Ends**

**(Monrovia—January 20, 2021)** – The Millennium Challenge Account-Liberia has announced the end, effective January 21, 2021, of the Millennium Challenge Compact between the United States Government and the Government of Liberia. The Compact has improved the amount and reliability of electricity supply, more than doubled the number of homes with electricity access, and left the Liberian government with a sustainable, data-driven road maintenance system.

With the signing of the Compact in October 2015, the United States Government, acting through the Millennium Challenge Corporation (MCC), provided US\$257 million to help increase access to more reliable and affordable electricity; and improve the planning and execution of routine, periodic, and emergency road maintenance.

The goal of the support to the energy and road sectors is to help reduce poverty through economic growth in Liberia.

## **Mt. Coffee Rehabilitation**

The Compact contributed US\$146.3 million to the rehabilitation of the Mt. Coffee Hydro Power Plant, the single largest support of any donor to the power plant, constituting 40 percent of the total US\$350 million spent to rebuild the hydropower plant.

With 88 MW power generating capacity, Mt. Coffee represents the largest source of power and renewable energy supply for the Liberia Electricity Corporation (LEC). Mt. Coffee has enabled LEC to expand more reliable and affordable power supply to more than 82,000 homes, businesses, and other entities, compared to a little over 34,000 when Mt. Coffee came online in 2016. Mt. Coffee also allowed LEC to reduce the average number of electricity outages by 45 percent since the start of the Compact. Outages are also much shorter now, with a reduction of 83 percent in the average duration of outages.

Electricity tariffs have also reduced from US\$0.56 per kilowatt-hour to US\$0.35 per kWh, representing a 37.5 percent decrease. While this is still a very high tariff, this decrease has made electricity more affordable for ordinary consumers, particularly marginalized households and small and medium enterprises. An independent study found that LEC offers cheaper and better-quality power than generators or mini-grids can provide. In focus group discussions with households and interviews with small business owners, respondents described how, once connected to LEC, they could start income-generating activities, such as selling cold drinks, or expand business operations by staying open later and offering more goods. Customers reported that their main use of electricity was lighting but also showed shifts toward using electronics and appliances. Small businesses shifted toward using freezers and large end-users shifted toward technology and machinery after connection.

At the commencement of the Mt. Coffee rehabilitation, Liberia lacked a skilled workforce to operate and maintain the hydropower plant. The project has provided for on-the-job training for operators and maintenance staff, which will allow for sustainable local operation and maintenance of Mt. Coffee. The project has already trained three generations of trainees in hydropower plant operation and maintenance.

## **Raw Water Pipeline Construction**

The MCC compact also funded the construction of a new 48-inch diameter Raw Water Pipeline between Mt. Coffee and the White Plains Water Treatment Plant to replace a damaged 36-inch diameter pipeline that had not been in use since before Liberia's civil war. By drawing water from Mt. Coffee, the new pipeline's operation will eliminate saltwater intrusion into the Liberia Water and Sewer Corporation (LWSC) water treatment plant at White Plains, which occurs in the dry season when the St. Paul River experiences low water levels. With the new bigger pipeline, the municipal water supply is not only of much higher quality but because of the use of gravity flow to transport water into the system, LWSC will save an estimated US\$780,000 annually in the cost of pumping water into the treatment plant. The new expanded pipeline will contribute to the increased supply of better quality water to about 1 million residents of Monrovia and surrounding areas. The total project cost is around US\$18 million.



*Figure 2: An aerial photo of the Mt. Coffee end of the Raw Water Pipeline, with a section shown in detail*

### **LEC Management Services Contract**

Aside from the investment in Mt. Coffee, a significant part of the Compact support went to helping LEC become a viable public utility. The compact funded the Liberian government's efforts to hire a private firm, ESB International (ESBI), under a management services contract to turn LEC into a more operationally and financially efficient and effective corporation. Despite many challenges, the utility has achieved success in the areas of network reliability, availability of power plants, collections efficiency, new customer connections, improved customer service, and information technology that can improve various aspects of utility's processes and procedures, such as network development and customer relations.

### **Procurement of Connection Materials for LEC**

Under the Compact, MCA-L invested in materials to help LEC increase connections, improve reliability, and provide more affordable electricity. This included procuring over US\$1.78 million in priority items, including transformers, meters, surge arrestors, specialized vehicles, spare parts for generators, utility poles, conductors, tools, and personal protective equipment.



*Figure 3: One of the items purchased with MCC compact funds – a bucket truck for LEC*

### **Refurbishment of LEC Waterside Customer Service Center**

MCA-L also remodeled LEC’s Waterside Customer Service Center into a state-of-the-art facility that now boasts 300 percent increased capacity. The remodeled facility now features spacious waiting areas, offices for LEC staff, a call center, and sanitary facilities more accessible to women and disabled people. Equipped with new IT infrastructure and staff trained in delivering effective customer service, the new Customer Service Center reduces waiting times for customers and allows for better tracking of service orders through the new, MCC-supported IT solutions.

A resident of the Duport Road community who has been an LEC customer since 2019 remarked, “The new service center is very beautiful. Our waiting time is now much shorter than before. LEC can now address our problems much faster.”



*Figure 4: A view of the reconstructed Customer Service Center at the LEC Waterside office, with details showing inside the facility.*

### **Capacity Building for LEC staff**

As part of additional compact support to LEC, MCA-L hired Tata Power to provide on-the-job training to over 100 supervisors, engineers, and technicians in core technical areas such as transmission and distribution, generation, planning, loss reduction, and health and safety. The beneficiaries intend to, in turn, train another 500 technical staff, resulting in at least 60 percent of the entire workforce at LEC benefitting from the capacity-building program. At completion, the activity aims for LEC staff to be better equipped to improve the effectiveness of utility operations.

### **Creation and Standup Support for the Liberia Electricity Regulatory Commission**

As part of the compact goal to increase access to more reliable and affordable electricity, the program supported the implementation of the Liberia Electricity Law of 2015, which created the Liberia Electricity Regulatory Commission (LERC) as the sector regulatory organ. The MCC Compact helped LERC become a functional regulatory body through funding of staff compensation, office space, vehicles, and equipment, furniture, training, and research studies. LERC will be responsible for the licensing of operators in the sector, setting technical standards, approving tariffs and fees, and protecting consumer interests. LERC's entry into the sector aims to assure the creation of an enabling environment for private sector participation and growth.



*Figure 5: Participants at a stakeholders validation workshop held by LERC to present draft regulations for the electricity sector*

### **Building Data-driven Road Maintenance System**

Improving Liberia's road infrastructure was the second piece of the MCC compact with Liberia, based on the logic that improved roads will stimulate investment and trade, which will contribute to economic growth, leading to poverty reduction.

Since 2015, MCA-L has supported policies and provided support aimed at strengthening Liberia's capacity to provide routine and periodic maintenance of paved and unpaved primary roads. The results included the drafting of the country's first-ever Five-Year Road Maintenance Plan developed through the application of road planning software using updated road network data. In addition, after the successful passage of the National Road Fund Act of 2016 by the legislature, which established a National Road Fund (NRF) for road maintenance and rehabilitation, the project worked to support the operationalization of the NRF through the provision of equipment and training. The NRF is currently funded through the collection of fuel levies and remains a critical resource for sustaining national road maintenance.

The MCC compact provided for a nationwide road inventory and condition assessment as well as dry and wet season traffic surveys of all primary roads. Additionally, MCA-L has worked with the Ministry of Public Works (MPW) to implement a US\$1 million Road Asset Management System (RAMS) that provides engineers access to a user-friendly database for data collection, planning, execution, and other maintenance-related functions for managing Liberia's entire road network. The system now allows MPW to make data-driven decisions about road maintenance. Training was provided to MPW and National Road Fund staff to collect and analyze road-related

data, and to update the Road Maintenance Plan using road planning tools funded through the Compact.



*Figure 6: Employees of the Liberia Renaissance Construction Company assess the conditions of roads across Liberia in partnership with the U.S. Department of Transportation’s Volpe National Transportation Systems Center*

### **Reflecting on the Compact Success**

“The United States and Liberia have had a substantial relationship for more than 150 years,” noted Kyeh Kim, Principal Deputy Vice President of Compact Operations at MCC. “MCC is proud of what we have achieved together and looks forward to seeing the positive economic impact of this investment for years to come. The Government of Liberia is well-positioned to build upon this foundation and grow the benefits, ensuring a bright future for the Liberian people.”

MCA-L CEO Monie Captan said he is proud of the work MCA-L has done and the impact it has had in providing more reliable and affordable electricity and ensuring data-driven maintenance planning for Liberia’s road network. He called on the Liberian people to be good stewards of the significant investments made by the U.S. government and people.

“More than a quarter billion dollars of American taxpayers’ money was allocated to addressing the lack of access to reliable and affordable electricity and inadequate road infrastructure in Liberia,” he said.

“We remain grateful to the Government and People of the United States of America for this kind and generous gesture. We also thank all our colleagues at the Millennium Challenge Corporation for their technical support and guidance in the implementation of the Liberia Compact. The responsibility now falls on us to manage these assets in the best interest of our country. We must

not rest supinely but build on the gains made so far. We must all also remain fully engaged in continuing to work to meet the high standards of good governance and the control of corruption. We have passed the test of MCC's governance indicators once, and we can do it again in securing a second compact."

Captan clarified that although the Compact ends at midnight on January 20, 2021, MCA-L will transition into a closure mode for a period of 120 days, after which the MCA-L will be legally dissolved. Upon its dissolution, MCA-L's assets would be distributed among its key partners, including LEC, MPW, LWSC, LERC, the Ministry of Mines and Energy, the National Road Fund, the Ministry of Finance and Development Planning, and the Ministry of Foreign Affairs.

***About MCA-L:** In October 2015, the Government of the United States of America, through its development agency, Millennium Challenge Corporation, provided a grant of US\$257 million to Liberia. MCA-L is an independent, legal, and autonomous agency of the Government of Liberia created by the legislature to administer the compact projects, which address the lack of access to reliable and affordable electricity and inadequate road infrastructure. Learn more about MCA-L at [www.mca.gov.lr](http://www.mca.gov.lr).*

***About MCC:** The Millennium Challenge Corporation is an independent U.S. Government agency working to reduce global poverty through economic growth. Created in 2004, MCC provides time-limited grants and assistance to poor countries that meet rigorous standards for good governance, from fighting corruption to respecting democratic rights. Learn more about MCC at [www.mcc.gov](http://www.mcc.gov).*