

Liberia Power Infrastrucutre

Abstract

From “Options for the Development of Liberia’s Energy Sector” published by the Africa Energy Unit of the World Bank in October 2011: In mid-2011, Liberia has possibly the lowest rate of access to public electricity in the world... Finally, the NEP sets out very ambitious targets, but leaves it unclear how these are to be met and what the budgetary implications would be. The key goals in the proposed policy related to the 2015 Millennium Development Goals include: The 40 percent of Liberian citizens living in rural and periurban areas and using traditional biomass for cooking shall have access to improved stoves and kerosene or efficient-gas cookers to cut indoor pollution. Thirty (30) percent of the urban and periurban population shall have access to reliable modern energy services, enabling them to meet their basic needs (lighting, cooking, communication, and small production-related activities). Fifteen (15) percent of the rural population shall have access to reliable modern energy services toward meeting the same basic needs. Twenty-five (25) percent of the schools, clinics, and community centers in rural areas shall have access to modern energy services (for lighting, refrigeration, information and communication, and so on) and shall be equipped with productive energy capacity.

Keywords: Liberia, Power, Electricity, Development

Liberia Power Infrastructure

Liberia is currently underserved in electricity and is driven by a variety of organization working together to create a distributed and decentralized power grid.

RURAL AND RENEWABLE ENERGY AGENCY (RREA)

Rural and Renewable Energy Agency (RREA) has a master plan to achieve 35% rural electrification by 2030. Target rates for the population outside of Monrovia are 10% by 2020,

20% by 2025 and 35% by 2030. All county capitals electrified by 2025. For Lofa County the Liberia Renewable Energy Access Project (LINERAP) plans construction of a mini-grid powered from a 2.5-MW hydropower plant with diesel back-up. This would supply electricity to major population centers (Voinjama, Foya, Kolahun, Massambolahun, Bolahun) and surrounding small towns. This decentralized power generation plan is a key part of the effort to bring electrification

GENERATING CAPACITY

From “Liberia’s Infrastructure: A Continental Perspective” by Vivien Foster and Nataliya Pushak. Published March 2011 by the World Bank: Liberia’s power generating capacity and national grid were completely demolished during 14 years of civil war. Piped water access fell from 15 percent of the population in 1986 to less than 3 percent in 2008. War also left the national road network in a state of severe disrepair. Since the return of peace, the port of Monrovia has resumed normal operations under private management, and progress has been made in securing donor finance for road reconstruction. Liberia has also successfully liberalized its mobile telephone markets, with low-priced access surging to 40 percent in 2009. Liberia’s starkest challenge lies in funding a more cost-effective power sector. The country’s generation capacity is barely one-tenth of the benchmark level of Africa’s other low-income countries. The cost of generating power is exorbitant, and the power tariff is three times the regional average. During the Liberia’s recent civil conflict period, the country’s key generation, transmission, and distribution assets were almost entirely looted or destroyed. Prior to the conflict, Liberia’s installed generation capacity was relatively high at 67 megawatts per million of people. Today the country runs on a single new small diesel plant of 9.6 megawatts. This level of power generation capacity amounts to less than 3 mega-watts per million people—barely a tenth of

what is found in neighboring countries. Moreover, access to utility power is close to zero, even in the capital city where only 0.1 percent of households are connected. Due to some prevalence of household generators, the 2007 Demographic and Health Survey reports that 3 percent of households have access to electricity. Liberia's mining and natural resource concessionaires have significant isolated generation capacity of their own, although the exact amount is not known.