

MOUNT COFFEE



Location
Liberia

PROJECT SUMMARY

Plans to build Liberia's first ever utility-scale solar farm are progressing thanks to a development loan from REPP to project company, Gigawatt Global.

The West African country currently suffers from one of the lowest electrification rates in the world at 4.9% and has a total installed capacity of just 126MW, which is constricting its prospects of economic growth.

Once built, the 20MW plant in central Liberia will increase the country's generation capacity by 15% and improve its grid's stability and resilience to climate change, as well as provide 20 permanent skilled and semi-skilled jobs for local men and women. It would also mark the country's first development by an independent power producer (IPP), paving the way for further private sector-led clean energy projects.

Developer Gigawatt Global Liberia Ltd.'s proposed site for the farm lies 5km from the Mount Coffee hydropower dam, which experiences periods of significantly reduced productivity during the dry season due to low water levels, made worse by the increased prevalence of droughts. The completed solar plant would complement the hydropower facility during periods of reduced production and in doing so displace the need for higher-cost diesel generation that most Liberians rely on for electricity while increasing the resilience of Liberia's power supply to climate change. During wetter periods the plant would supplement the dam's clean energy production.

REPP's loan was approved based on a short, 18-month tenor, with an option to extend, and is being used to carry out feasibility studies that will enable Gigawatt Global Liberia to better understand the issues that need to be addressed to bring the project on stream.

If the development – which has been openly supported by the Liberian government – proves a success, it will provide a strong demonstration of impact for other clean energy projects regionally and help build the necessary capacity at government level to support the growth of Liberia's nascent solar sector.

The solar project is the second REPP-supported project by Gigawatt Global, with the other being a 7.5MW (AC) solar facility in Mubuga, Burundi.



Country policy alignment

Supports Liberia's NDC (2018) targets to reduce GHG emissions by >10% and make renewable energy >75% of the energy mix, as outlined in the Rural Energy Strategy and Master Plan (2016). If successful, the project will be Liberia's first IPP, setting the model for private sector participation in the energy market development in line with the NDC and the National Energy Policy and Response Strategy on Climate Change (2018).

AT A GLANCE

Technology:

Grid-connected solar PV



Project type:

Greenfield, grid-connected

Offtaker:

Liberia Electricity Corporation (LEC)

KPIs



GHG emissions avoided:
17,520 tCO₂e per year



Improves stability of grid supply



Installed capacity:
20MW

FUNDING STRUCTURE

Signed: 13 December 2018

Type: Development loan

REPP funding: USD 615,000

SDGs

7 AFFORDABLE AND CLEAN ENERGY



8 DECENT WORK AND ECONOMIC GROWTH



11 SUSTAINABLE CITIES AND COMMUNITIES



13 CLIMATE ACTION



17 PARTNERSHIPS FOR THE GOALS



"Gigawatt Global is pleased to partner with the UK's REPP to unlock the potential of deeply impactful renewable energy projects where they're needed most. This is especially evident in Liberia which struggles with seasonal hydro levels and reliance on expensive polluting diesel power, thus benefiting greatly from Gigawatt's solar project."

Michael Fichtenberg, Executive VP Finance & Business Development, Gigawatt Global