



## Decentralized Grid

**DG – Decentralized grids program:** The DG Program represents a total investment of USD 292M and will enable the electrification of 96 800 homes and 489 thousand people and the addition of 53 MW of decentralized renewable generation. The DG Program investment is more concentrated in the first phase due to the Solar/Diesel transitional grids which enable the short term electrification of several County Capitals and large cities. Currently, USD 60M are estimated to be funded – mostly dedicated to hydro – with several projects on-going. The investments and impacts for the DG program are presented in the following Table, and a map of the DG Program infrastructure is presented in the next Figure.

Decentralized Grids Program is composed of main initiatives:

- **DG.1 – Diesel/Solar transitional mini-grids initiative.** The objective of this Initiative is to promote the anticipation of electrification in several large and medium sized settlements, located in areas where the grid coverage is not expected in the short and medium term. In total four main projects are to be executed in all regions of the country. These projects will consist in the implementation of solar/diesel hybrid systems and the electrification of the town's residential and services clients. The distribution grids are to remain in operation when grid coverage is available.
- **DG.2 – Decentralized grids and cross border consolidation initiative.** The objective of this Initiative is to promote the consolidation and extension of the Cross Border grids connected to Cote d'Ivoire, and the creation of Large Decentralized Grids that will have some extent, although not being connected to the national system. In total, eight projected are to be implemented in Regions 1, 2 and 4.
- **DG.3 – Generation for decentralized grid initiatives.** This Initiative relates with the construction of generation projects for energy supply to the previously mentioned Decentralized Grids. In total, this initiative is composed by seven main generation projects to be implemented in different parts of the country.
- **DG.4 – Micro Systems.** Biomass and micro-hydro generation. This Initiative relates with the implementation of micro-generation systems in several communities using hydro and biomass resources, as well as the electrification of those communities. This initiative is composed by five projects to be implemented in Gbarpolu, Grand Cape Mount, Lofa, Nimba, River Cess and River Gee counties.

	Impact		Investments per phase (MUSD)				Estimated funding committed (MUSD)			
	Number of People (Thousands)	MW	Phase 1	Phase 2	Phase 3	Total	Phase 1 Committed	Phase 2 Committed	Phase 3 Committed	Committed funding (estimate)
<b>II. DG DECENTRALIZED GRIDS PROGRAM</b>	<b>489.1</b>	<b>62.5</b>	<b>117.4</b>	<b>84.8</b>	<b>89.7</b>	<b>291.8</b>	<b>60.0</b>	<b>0.0</b>	<b>0.0</b>	<b>60.0</b>
DG.1 Diesel/Solar Transitional Mini-Grids	101.8	25.1	28.9	11.4	7.5	47.8	2.8	0.0	0.0	2.8
DG.2 Decentralized grids and Cross Border consolidation	382.1	0.0	34.9	24.3	45.4	104.6	13.1	0.0	0.0	13.1
DG.3 Generation IPP for decentralized grids	0.0	36.8	53.0	41.0	34.9	128.9	43.7	0.0	0.0	43.7
DG.4 Micro-Systems	5.2	0.6	0.5	8.0	1.9	10.5	0.5	0.0	0.0	0.5

## DECENTRALIZED GRIDS PROGRAM INFRASTRUCTURE

