



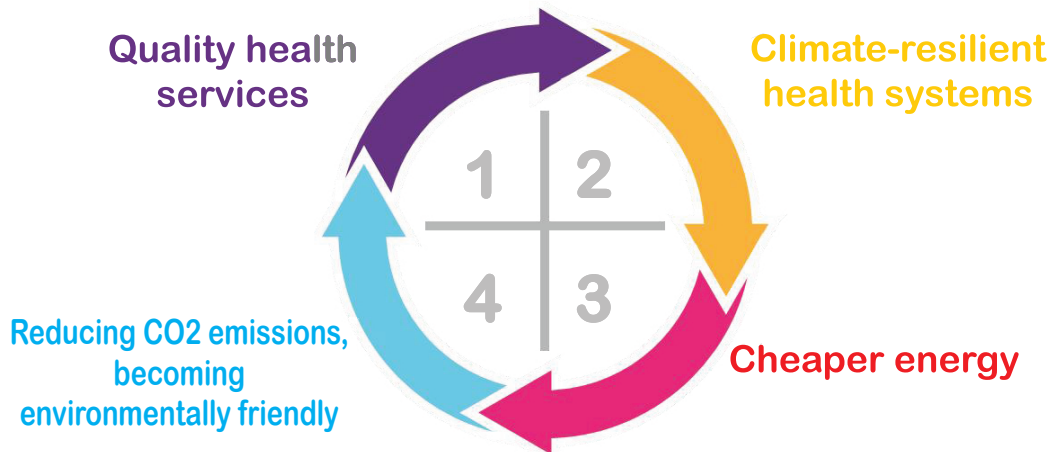
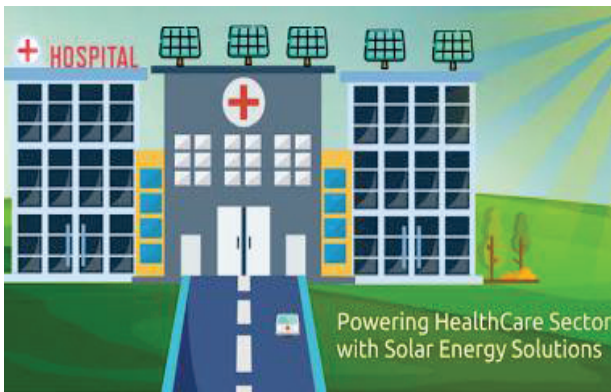
**AGI**  
**ENERGY**  
**SERVICE CENTRE**  
Sustainable Energy for Profitability

## SOLAR PV FOR THE HEALTH SECTOR

### The Challenge

The lack of reliable power in health facilities undermines the quality of healthcare for millions of people. According to the World Health Organisation (WHO), nearly 60% of health centres in sub-Saharan Africa do not have access to electricity, and of those that do, only

34% of hospitals and 28% of health clinics have reliable access. Nearly 60% of refrigerators used in health clinics in Africa do not have reliable electricity necessary for the safe storage of vaccines and medicines. The WHO further states that half of all vaccines distributed globally are ruined due to lack of refrigeration.



### The Opportunity

The Opportunity Global recognition of the need for universal energy access and strengthened health systems coupled with recent advances in off-grid energy solutions, present a timely opportunity to improve access to quality healthcare and make health facilities more resilient. Off-grid renewable energy solutions

can provide clean, reliable and cost-effective electricity to hospitals and health centres in Ghana. The rapidly growing solar PV sector offers significant opportunities to provide power for critical healthcare infrastructure. Solar energy with energy storage systems can be installed quickly in rural and off-grid areas to serve health clinics.

## 01 Quality health services

Solar systems provide a stable, clean and reliable energy supply, even in remote

locations, meaning more patients can access the health services they need.



## 02 Climate-resilient health systems

Solar systems can help health facilities increase their resilience to the challenges presented by climate change, including extreme weather events, droughts, and other events affecting traditional power supply. Recent natural disasters have highlighted the need for critical infrastructure improvements. One solution to serious power outages in Ghana is reliable distributed generation, such as solar PV systems with battery storage.

## 04 Climate-resilient health systems

Solar PV could result in lower power bills for health facilities. These vital budget savings can then be reinvested to support other priority health programmes or infrastructure. Though solar PV projects may have longer payback periods than some other sustainability measures and other healthcare-related capital investments, a solar PV project typically has a very favourable return on investment over its 25+ year operating life.

## 03 Reduced carbon emissions

Energy access plays a vital role in enabling health care delivery, but it should include an explicit focus on progressively shifting to renewable energy and substituting fossil-based sources. Solar PV systems provide electricity without any direct emissions and help reduce harmful air pollution and greenhouse gas emissions by displacing electricity generated from coal, natural gas, and oil power plants. The decommissioning of highly polluting and noisy diesel generators considerably improves the local environment around health facilities.



For additional information on this opportunity, please contact:



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