



Aga Khan Health Services

Afghanistan: Aga Khan Health Services Solarising Bamyan Provincial Hospital

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The Bamyan Provincial Hospital was originally a government-run facility with a capacity of 35 beds, 15 of which were housed in a tent and relied entirely on a diesel generator. In 2004, the Aga Khan Health Services, Afghanistan (AKHS, A), assumed responsibility for the hospital's operations through a Public-Private Partnership with the Afghan authorities. Under AKHS, A's management, the hospital's capacity was expanded to more than 100 beds, new equipment was installed, staff were trained, and a steady supply of medicines was ensured.

When building the new hospital, solarisation was a key priority. In 2013, AKHS, A, constructed a new eco-friendly and seismic-resistant 141-bed hospital (with support from the Aga Khan Foundation Canada, and the governments of Canada and France). In 2016, in line with its environmental stewardship and eco-friendly construction policy, the facility was equipped with a 400-kW solar plant and 576 batteries, with a later addition of 144 batteries - totaling 720 batteries and a power storage capacity of 2,160 kWh, thereby enhancing energy efficiency. Since then, the solar plant has been generating an average of about 50% of the facility's electricity consumption, resulting in cost savings of approximately USD 270,000 annually. This has contributed to an avoidance of diesel consumption of approximately 130,000 liters, and associated 350 tCO₂e emissions, annually. The payback time was achieved within 7 years.

AKHS, A is committed to reducing carbon emissions and achieving net zero by 2030. AKDN's carbon management tool was used to calculate carbon emissions.

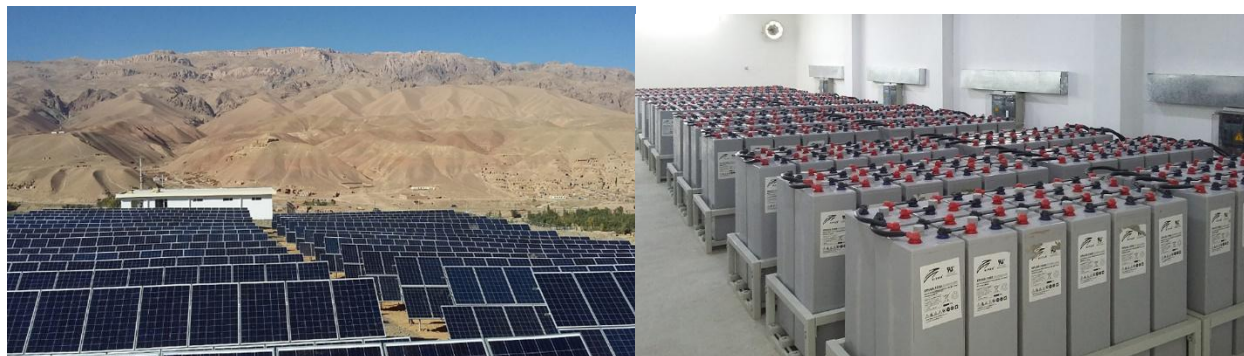


Figure 1: Solar plant with batteries at Bamyan Provincial Hospital