

Adjegan Solar drinking water networks



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Country, Region, Town:

Togo, Maritim, Adjegan

Technology Transfer: Anodic oxidation disinfection for water purification treatment; Submersible solar pump to access groundwater supply

Standard: Gold Standard

COD: March 2023;

Status: Active project; Ability to provide 10,000 L clean drinking water per day

Achieved Benefit: Access to drinking water; Reduction of adverse health effects; Avoidance of harmful gases by replacing firewood

Adjegan is a village of about 1000 inhabitants located 56km from Lomé. The village does not have a drinking water well. The inhabitants of the village and the neighbouring village of Anfoin, 3 km away, buy their drinking water from suppliers who fetch the water by motorbike. The villagers, who do not have the means, use surface water, which they boil to eliminate bacteria and viruses.

For the drinking water network in Adjegan, a borehole with a depth of 51m is drilled. The central station of the solar drinking water network includes the water purification system, the water tank, the booster pump and a roof-top solar-PV system with an installed capacity varying 6 kWp. The technology of water purification system is based on electrolytic process (Anodic Oxidation). The required disinfectant chlorine is produced from minerals that are commonly present in the source water.

6 CLEAN WATER AND SANITATION



Emission Reduction:

Approx. 120 t CO2 equivalent per year

3 GOOD HEALTH AND WELL-BEING



13 CLIMATE ACTION



8 DECENT WORK AND ECONOMIC GROWTH



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Two water kiosks are built in the village of Adjegan, one of which is built at a school site.

Pupils from the nearby school receive NFC cards

with 5L water allowance per person per day for the whole year. Drinking bottles are also provided for all 625 pupils of the school, sponsored by Wacker Chemie AG.

