

Solar Green Energy (Cambodia) Co., Ltd called "SOGE", was legally registered in December 2013 to work in Cambodia's renewable energy sector, with a focus on solar energy. SOGE's goal is to increase the use of green energy in rural Cambodia. The company is known for providing high quality products and reliable services. They sell a variety of solar systems throughout several value chains, including solar off & on grid systems, solar water pumps, solar back-up systems and smart cooling systems.

The demonstration site is located in Aranh Village, Siem Reap Commune, Siem Reap Province.

The owner of the demo-site, Mr. Sam Sary, installed the first hydroponic greenhouse at the back of their house in 2020 to grow leafy vegetables. In mid-2021, they further invested to expand the production by adding two greenhouses, one for hydroponics and the other as a nursery. This installation included a solar smart cooling system (supplied by SOGE) for the main two greenhouses. As part of the demonstration site,

SOGE equipped the greenhouse nursery with a solar smart cooling system and thus expanded the system across the entire production facility. Mr Sam Sary focuses on leafy vegetables, especially lettuce, curly cabbage, pok choy, and Chinese kale. Between seeding and harvest, cycles last about 28 days. They are actively experimenting to expand the production; attempting to grow highervalue crops to reach premium markets.

SWITCH to Solar













Benefits of the solution include



Operational Expense Reduction

Solar Smart Cooling System system will offset grid-electricity costs related to the use of hydroponic pumps, temperature & humidity sensors, and exhaust fans.



Reduction of carbon emissions

Solar Smart Cooling Systems can reduce CO2 emissions by 5.89 tCO2/year by offsetting grid energy used to power pumps & fans.



Increase in Vegetable Quality

Producing under a fully controlled environment (temperature and humidity) will contribute to the improvement of the products' quality and consumer safety.



Increase Revenue

The Solar Smart Cooling System should increase production and allow the farmer to produce during the dry season, normally a low vegetable production period.

(switchtosolarkh.org f SWITCH to Solar Solar Solar Solar 520 860