CAA Communications And Accessories Int. GmbH

# PROJECT SUMMARY SHEET

Title of Project: **University of Botswana's Mokolodi Village Project**
Project Reference N°: **AUR/140/2012**

Customer: **University of Botswana**

Contract amount: **US$ 71.675,52**

Award Date: **29.08.2014**

Project Overview:
**To the south of Gaborone, and bordering the Mokolodi Game Reserve, is the small village of Mokolodi, which is home to about 600 people. Right in the heart of this village, the Clean Energy Research Centre at the University of Botswana has built, using money from an EU grant channeled through the African Union, a small, but —in the history of solar power in Botswana—an important solar PV installation.**

**The Mokolodi system has a rating of 20 kW and, because it is an experimental system, consists of the following components:**

- **A 5 kW system on the village clinic to provide daytime power for the clinic and to feed excess electricity into the grid;**
- **A 2 kW system on the home of the village Chief to provide daytime power and to feed excess electricity into the grid during the day;**
- **A 10 kW system at the Kgotla (meeting place), designed to power the Kgotla and some Village Development Committee owned homes during the day, with any excess fed into the grid;**
- **A 3 kW experimental system that consists of three different types of silicon-based panels that their performance can be compared and contrasted;**
- **A small weather station to measure the solar irradiation, temperatures, and wind speed.**

**One of the more interesting aspects of this project is the direct comparison of the performance of the three types of panels (1 kW of monocrystalline silicon panels, 1 kW of polycrystalline panels, and 1 kW of amorphous silicon panels) under the energetic and harsh Botswana sunlight. UB researchers will be able to monitor their performances over the short and long term to determine which would be best for the high irradiation conditions here.**

**The UB team at the Clean Energy Research Centre will also be investigating the socioeconomic benefits to communities of free solar energy during the day and purchased electricity at night. The project is close to completion and hopefully will be commissioned in the near future. As the project moves forward and starts generating research results, I hope to share some details in a future blog.**

**This post has taken an in depth look at two important grid-connected PV systems in Botswana and in the next, I will be discussing the far more numerous off-grid systems that are scattered throughout the country. In the meantime, look out for solar projects and remember to turn off the lights when you leave the room.**

Source: http://botswanaenergy.blogspot.de/2016/02/grid-connected-solar-photovoltaic_14.html