Stellenbosch University new spin off solar company: GeoSUN Africa

GeoSUN Africa was launched in November 2012 and is a spin-off company of the Centre for Renewable and Sustainable Energy Studies (<u>CRSES</u>) at the University of Stellenbosch. GeoSUN Africa offers a variety of services relating to the solar energy industry. Supporting services to solar developers of large solar (PV, CPV and CSP) plants make up a large part of GeoSUN Africa operations. Other services relate to rooftop or stand-alone PV installations and solar mapping.

GeoSUN Africa has a history of experience with on-site solar resource assessments. GeoSUN has installed a number of solar measurement stations in South Africa and neighboring countries mainly for solar project developers but also for national weather agencies. GeoSUN Africa currently maintains nine on-site measurement stations for developers.

While still part of CRSES, GeoSUN Africa formed a close working relationship with GeoModel Solar (based in Slovakia), the proprietor of the SolarGIS satellite derived solar database. Satellite derived data is used as a quality check when doing on-site measurements during the measurement campaign. A multi-year historic satellite derived data time series, typical 15 – 20 years, is combined with on-site measurements to obtain a bankable data time series. The CRSES evaluated a number of satellite derived data suppliers by comparing their data to ground measured data and found the SolarGIS to be of exceptional accuracy, especially on DNI (Direct Normal Irradiance) values. This led to GeoSUN Africa's current formal relationship with GeoModel Solar. GeoSUN Africa also has the exclusive right to market the SolarGIS products in Southern Africa. GeoSUN Africa maintains a close and formal tie with the University of Stellenbosch, specifically the Centre for Renewable and Sustainable Energy Studies (CRSES).

A close working relationship is also maintained with <u>CS Africa</u>, a Stellenbosch based company who is the agent for <u>Kipp&Zonen</u>, <u>Campbell Scientific</u> and other meteorological measurement products in various African countries. To ascertain and maintain accurate solar irradiation measurements, GeoSUN Africa works in partnership with the Solar Thermal Energy Research Group (<u>STERG</u>) at the University of Stellenbosch, the Sustainable Energy Research Group (<u>SERG</u>) at the University of KwaZulu-Natal (<u>UKZN</u>) in Durban and the Centre for Energy Research (<u>CER</u>) at the Nelson Mandela Metropolitan University (<u>NMMU</u>) in Port Elizabeth.

GeoSUN Africa provides its services in any African country, as well as other locations around the globe. GeoSUN Africa offers the following services and products:

- Site Selection Studies
- Supply of satellite derived data time series
- Onsite solar measurements (This includes the specification, procurement, installation, monitoring and maintenance of these stations as well as regular data download, quality checks and archiving)
- Bankable solar resource reports (PV, CPV and CSP) as required by financial institutions.
 This is also provided for rooftop PV projects.
- Bankable generation forecast (yield) reports (PV only) as required for a RE-IPPP bid submission. Also for rooftop PV projects.
- Independent yield or solar resource reports
- Bankable solar data for operating large solar plants (PV, CPV and CSP)
- · Monitoring services for rooftop or small ground mounted PV plants
- Solar maps (this includes poster maps or GIS or Google Earth layers)

For more information on GeoSUN contact the CEO, Mr Riaan Meyer, on riaan.meyer@geosun.co.za or 084 876 4816 or www.geosun.co.za.