

Detailed 'solar measurement systems' by Norm Energy ...

Norm Energy Systems gives the "solar radiation and insolation time" measurement services that are decisive for the solar power plant investors in calculating the time of the return of investment (ROI) in projects, efficiency, and ion of the suitable technologies in full detail.

Saying that the solar energy maps and atlases are prepared with the data of meteorological stations established in some regions in the city centers that are encircled with buildings and barriers, Ibrahim Erkan Yenen, General Manager-Norm Energy Systems, stated that the data are thus insufficient and unsound, even though they are correct in meteorological sense, for energy planning. Noting that a fast process of production and investment has been experienced in the solar power and especially the photovoltaic module applications in the world and in Turkey, Yenen said, "In energy planning, it is highly risky to develop projects with maps. While preparing the projects, the solar radiation and insolation time measurements must be made in detail. It is necessary to measure the atmospheric and environmental impacts affecting the photovoltaic modules, and make the feasibility studies accordingly."

Noting that making the feasibility studies with the data acquired through detailed local measurements is very important in solar power investments for the system design, technology ion, installation, performance monitoring, future-oriented power generation estimations, and the sound investment cost and ROI analyses, Yenen said, "We give turnkey 'solar energy measurement system' application services to provide the investors with sound, correct, and continued information."

Yenen said that the standard solar energy measurement system package keeps the record of the solar energy radiation data, wind velocity, pressure, heat, and humidity data. Yenen said, "This system allows transferring the information on a daily basis via GSM modem. Including operation and maintenance, it is possible to monitor and interpret the data by comparing with the simulation", and listed some of the basic parameters that are effective in the electricity generation by photovoltaic modules: intensity of the received solar radiation, insolation time, the solar incidence angle, the optimum efficiency heat, composition of the material used, cell temperature, environmental temperature, and the chemical composition of the cell.

