



CASE STUDY

OAKEY SOLAR FARM

PROJECT SCOPE

THE OAKEY SOLAR FARM IS LOCATED IN SOUTH EAST QUEENSLAND WEST OF TOOWOOMBA, APPROXIMATELY 6.5KM WEST OF THE TOWNSHIP OF OAKEY.

It is an 80 MW solar photovoltaic project on approximately 60 hectares and features 93,600 solar modules which will generate approximately 59.9 GWh of clean, renewable energy each year. Each solar panel is able to maximise the total energy generated as the design uses single-axis tracking technology, which enables the solar panels to tilt in the direction of the sun.

Land Surveys was engaged to undertake surveying works such as UAV, topographic and construction.

The UAV (commonly known as the Phantom IV drone) was used to capture data to produce a video of the site, a virtual tour of the site and aerial photography. This enables the client to view the site remotely and it gives them an indication of tree heights and where the shadows are, which are important factors for a solar farm.

The topographic survey is for design purposes as it records the slope of the land, what is on the land, and the aspect of the land (where it faces), which enables the best design to maximise the sunlight.

The construction surveying works due to be undertaken will consist of set outs of the solar panel frames. These frames will consist of posts which will be placed in the ground, joined by a long rod, which all the panels will be attached to. The panels will be able to follow the sun during the day as they will be able to tilt their position depending on where the sun is.

Three surveyors worked on this project for UAV and topographic surveying works as required. Once construction commences, there will be one surveyor assigned to the project for approximately three to four days per week.

CLIENT

Hellier McFarland
(Project Manager) /
Biosar (Developer)

PROJECT DURATION

Current

PROJECT VALUE

\$50M

Location

Oakey, QLD