

SHADING ANALYSIS

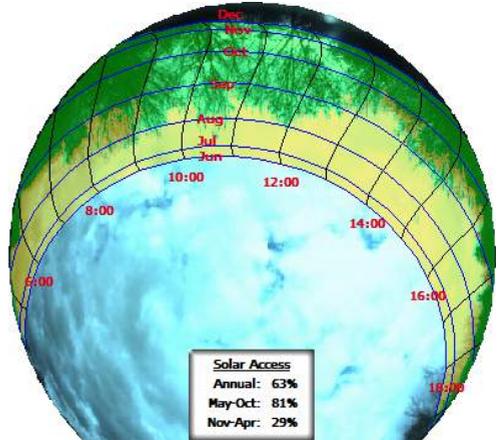
SHADING

IMPACTS OF SHADING AND BENEFITS OF ANALYSIS

Shading can affect the performance and output of a solar PV system. If not accurately assessed and mitigated against shading can cause a system to underperform which will in turn greatly reduce the renewable energy payments and reducing the return on investment.

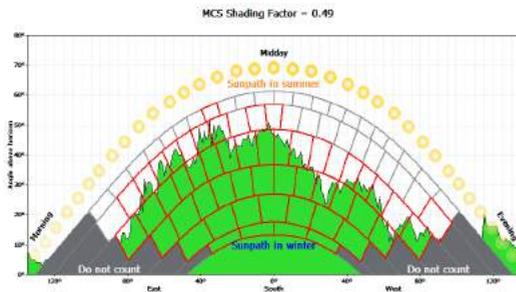
PV modules are typically strung in series, therefore if one module is in shade the output of the other modules within the same string will also be reduced. This effect can also be seen on a cell level when a PV panel may be in partial shade since a PV module is comprised of a series of cells.

Modules are designed to minimise the effect of shading on a cell by using bypass diodes, which reroute the current to bypass the underperforming cells and it is advantageous to minimise the effect of shading on a system at the design stages.



SHADING SURVEYS

AND HOW LHW PARTNERSHIP CAN HELP



Causes of shading are numerous however the most common factors include orientation, trees, buildings, aerials, vent pipes and dirt build-up. It is therefore advantageous to design a system which can withstand or overcome these obstacles.

LHW Partnership utilise cutting-edge technology to accurately assess the impact of shading on your PV system, employing our extensive knowledge of new technologies and years of experience within the renewables industry.

SERVICES

LHW PARTNERSHIP LLP OFFERS THE FOLLOWING SERVICES ASSOCIATED WITH SHADING

- + On-site Evaluation
- + Technical Reports
- + 3D Shading Simulations
- + Panel / Inverter Selection
- + Mechanical / Electrical Design
- + Stringing Design
- + Post-installation Verification
- + Recommendations for Remedial Works

