

Background bifacial solar modules and their efficiency

Bifacial solar cells have the special feature that the front and back are optically active. By inserting the solar cells between two approximately 2.5 mm/0.10" thick glass plates, a stable module in sandwich design is created, which is superior in terms of yield to standard modules with only one active vertical surface.

Depending on the orientation of the elevation, the systems also offer a different generation profile compared to conventional solar systems. In the case of a vertical elevation with an orientation to the east or west, bifacial solar systems can produce the majority of the electricity in the morning and evening hours, i.e. at times (over 30% more) when standard south-facing systems generate hardly any electricity.

Especially with regards to the energy transition, this generation profile "Solar power with generation peaks in the morning and evening" is very income savvy. Less maintenance is required to keep the solar panels clean for high performance and output.

Bifacial PV modules provide more flexibility in installation design and minimizes space for installation.

