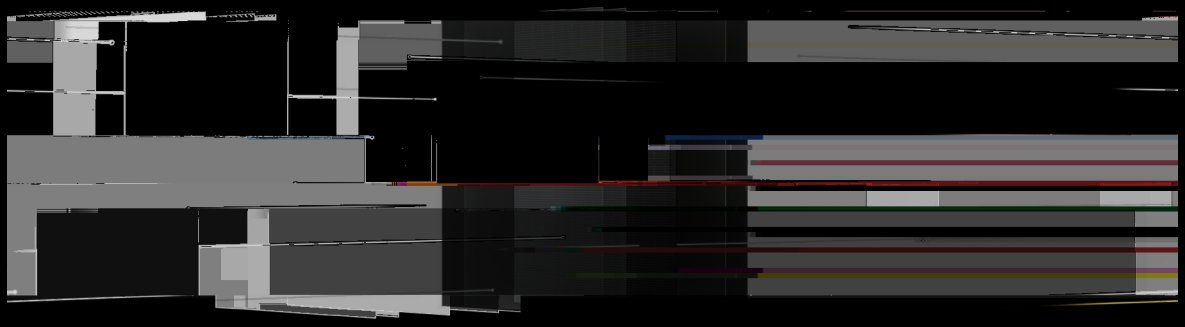
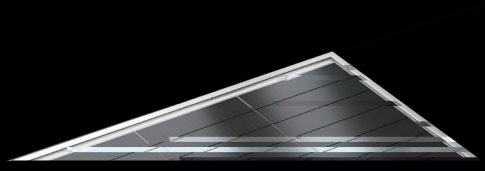
Whereas BC cell which has a relatively complex architecture and electrode areas on the back side, any optimization of light absorption becomes much more difficult. Though BC is also improving its bifacility, owing to the inherent limitations of the rear surface structure, attaining high bifaciality in BC cell remains a considerable challenge. Due to the electrode region retained in the rear side surface, BC is naturally weaker on bifacility. The increased thickness of BC cell considering the more complicated fabrication of its rear surface introduces more defects and less light absorption of back side compared to TOPCon cells.



More and more real world projects highlighted the contribution of rear-side power which used to be underestimated, a comprehensive calculation that considers both front and rear power is not only more logical but also has been widely proved that it better reflects the real output and performance of solar panels. This makes sense, the optical properties of the rear side undoubtedly increase the total useable irradiance and efficiency behavior as function of the irradiance.

Neo 3.0 bifacial TOPCon photovoltaic modules are encapsulated with an impressive bifaciality of 85±5% and a power output of 650-670W. It is the highest bifaciality so far for commercialized solar cells and modules to the best knowledge.