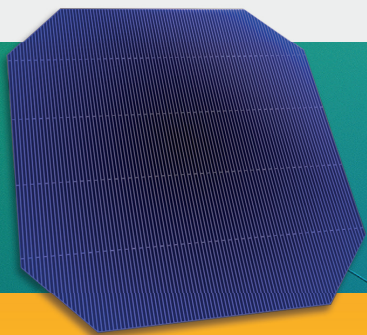


The heterojunction solar cell technology (HJT) has revolutionized the way we think about solar energy. Unlike TOPCon, HJT cells are made from two different materials, crystalline silicon and amorphous silicon thin-film. **The combination of materials allows for more efficient capture of sun light** and transfer of electrons in general, resulting in a higher energy conversion rate potential and better outcome for homeowners and businesses



TANDEM SOLAR CELL

The majority of solar panel manufacturers moves to TOPCon as a quick and simple successor of PERC to offer some incremental efficiency gains. We at REC believe that **HJT holds immense potential for efficiency growth and is also the best option for future developments like tandem structures.** In fact, all recently achieved world records for cell efficiency in the lab are based on HJT.

MAY WE INTRODUCE: THIS IS AMI !

As the solar industry races towards larger wafers for higher efficiencies, it faces **challenges to switch to G12 large wafers and cells on HJT**. A crucial enabler to overcome this challenge is **AMI – Advanced Module Interconnection** – incorporated into the REC Alpha Pure-R Series for the first time. The innovative solder-free foil wire combination is **enabling REC to even further master the advanced HJT technology and to achieve higher throughputs.**



In addition, the innovative foil wire combination, allows a **higher resistance against micro-cracks** compared to busbar connections, ensuring a more reliable high performance for the long-term. Going for solder-free connections, allows REC to offer a **lead-free and RoHS compliant solar product.**

AMI is key to unlock the full potential of G12 wafers on REC's Alpha HJT technology and to propel the industry forward with higher throughputs, improved reliability, and eco-friendly solar products. So buckle up, because the future of solar energy has never looked brighter!

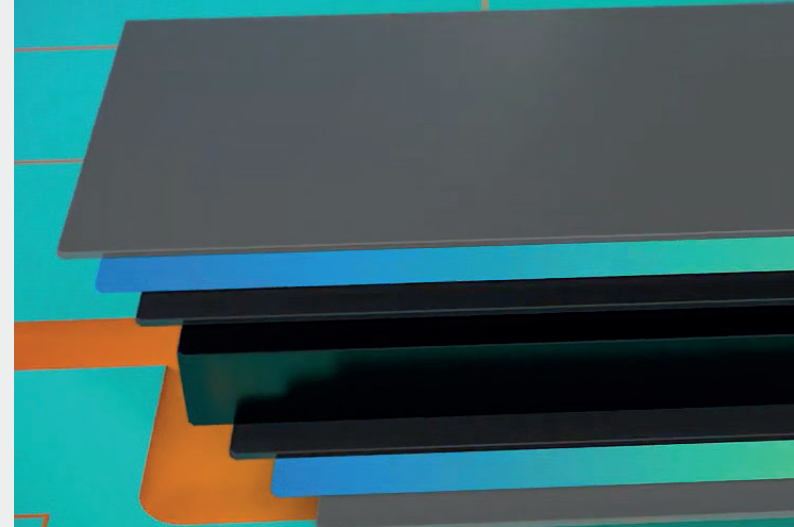


Read the full article here



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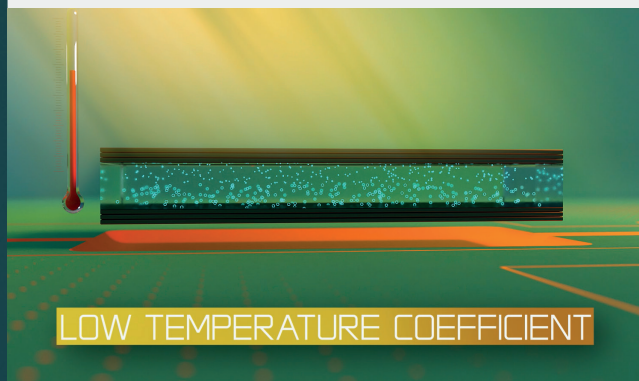
HETEROJUNCTION CELL

MASTERING HJT
SOLAR TECHNOLOGY
OF THE FUTURE,
ALREADY TODAY AT REC



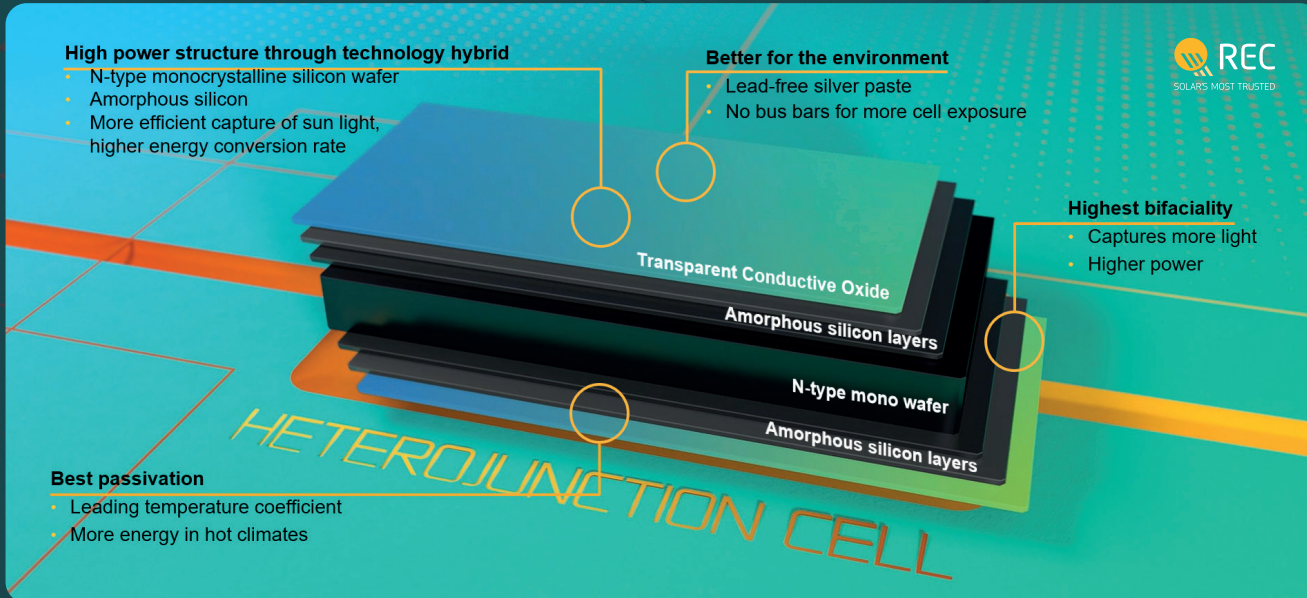
The majority of today's TOPCon solar panels comes with a degradation of 0.4% per year and 89.X% power at year 25. **REC's Alpha HJT products guarantee at least 92% power output at year 25¹, giving consumers and installers a greater peace of mind.**

¹ Under the comprehensive REC ProTrust warranty, subject to conditions.



LOW TEMPERATURE COEFFICIENT

The materials in HJT cells have a lower thermal conductivity, which leads to a **higher overall energy output, even under hot climate conditions thanks to a low temperature coefficient.**



The manufacturing of HJT cells requires significantly less steps (6 compared to 11-14 steps for TOPCon) and is possible through a low temperature process, reducing significantly energy consumption and better protecting our environment.



For REC as an innovator with more than 25 years of solar experience, **HJT is a true pioneering technology and the basis for the best solar products of the future.** Most manufacturers will likely head that route at some point. REC is already there.

With its Alpha revolution since 2019, **REC has continuously mastered the HJT technology, increasing panel performance while minimizing environmental footprint:**

2019: REC Alpha Series, launched as the most powerful 60-cell solar module, 2020 Intersolar Award winner

2021: REC Alpha Pure Series, lead-free and RoHS compliant, 2022 Intersolar Award winner

2022: REC Alpha Pure-R Series, launched as world's highest-power solar panel for residential installations with G12 HJT cells. With up to 430 Wp packed into less than 2 m², the new REC Alpha Pure-R hits the sweet spot in terms of power output, size, weight, and handling.

¹ Under the comprehensive REC ProTrust warranty, subject to conditions.

