



A cleaner and safer solar solution

Belinus made a significant impact in Munich earlier this year, solidifying its position as a leading contender in the solar energy industry. The company's engagement with field specialists who share its fundamental values and interests served as a testament to its esteemed reputation and commitment to advancing the field of solar energy.

One of the highlights of Intersolar for the company was the introduction of its revolutionary heterojunction (HJT) technology combined with butyl technology. This unveiling marked a significant milestone in its history and showcased its commitment to pushing the boundaries of solar panel technology. By combining these cutting-edge technologies, Belinus demonstrated its dedication to providing innovative solutions to its customers.

The star of the company's showcase in Munich was the Nova PV Module. This leading-edge module represents a remarkable advancement in solar technology, incorporating the latest features to maximize energy generation and durability.

One of the key features of the Nova PV Module is its exceptional bi-faciality, with an impressive 90% efficiency in capturing sunlight from both the front and rear sides. This distinctive feature enables the module to harness solar energy not only from direct sunlight but also from reflected light, significantly augmenting overall power output. This makes the Nova PV Module particularly well-suited for installation in areas with high albedo, or where the module can be mounted in a way that allows light to reach both sides.

The Nova PV Module also maintains its performance even in high-temperature environments. Thanks to its super low Pmax temperature coefficient, the module is designed to minimise power output reduction under elevated temperatures. While conventional solar modules may experience diminished power output under such conditions, the Module ensures optimal energy production throughout the day, making it a reliable choice for regions with hot climates.

Furthermore, it sets itself apart by being manufactured without PFAS contamination. PFAS, or per- and polyfluoroalkyl substances, are a group of human-made chemicals that have been found to have harmful effects on health and the environment. By eliminating PFAS from the manufacturing process, Belinus prioritises environmental protection and human health, offering a cleaner and safer solar solution.

To give customers confidence in the performance and longevity of the Nova PV Module, the company offers an extensive

35-year warranty on product, performance, and service. This comprehensive warranty attests to the exceptional quality and reliability of the module, providing long-term assurance and peace of mind.

In addition to its product innovations, Belinus announced its plans to establish a cutting-edge manufacturing facility in Belgium within the next six to eight months. This strategic decision is in response to the increasing demand from end-users and will enable the company to meet the growing requests for solar panels designed, engineered, and proudly manufactured in Europe. The establishment of this facility demonstrates the business's commitment to supporting the local economy and reducing carbon emissions associated with transportation.

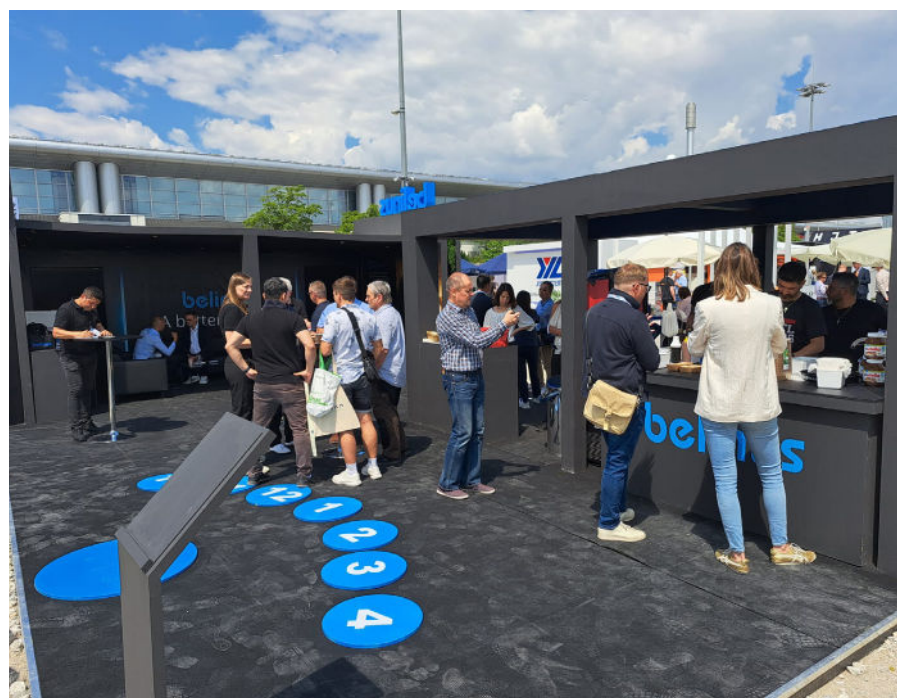
The announcement of its plans to establish an advanced manufacturing facility in Belgium is an exciting development for both the company and the solar energy industry in Europe. This strategic decision reflects the increasing demand for solar panels in the region and the company's commitment to meeting that demand with locally produced panels. By manufacturing in Europe, it reduces transportation-related carbon emissions and supports local economies. The facility will likely contribute to job

creation and technological advancements in the solar energy sector, further strengthening the brand's position as a leader in the industry.

With its forthcoming manufacturing facility in Belgium, the company demonstrates its dedication to meeting the growing demand for European-made solar panels, while supporting local economies and reducing carbon emissions.

Belinus's continued pursuit of excellence and sustainability solidifies its position as a leading contender in the solar energy industry, driving the global transition towards a cleaner and more sustainable future. The company's forthcoming manufacturing facility in Belgium will further enhance its capabilities and pave the way for future advancements in solar technology. By combining innovation, sustainability, and a customer-centric approach, it is poised to shape the future of solar energy and contribute to a more sustainable planet.

In Munich, the company also showcased its flagship product, the Interdigitated Back Contact (IBC) solar cell. This offers several advantages that contribute to its increased efficiency and superior performance.





One of the primary advantages of the IBC cells is the significant reduction in shading losses. The front electrode of the IBC cell is exceptionally small, resulting in minimal shading and improved light absorption. This reduction in shading losses translates to a notable increase in power generation, with potential gains ranging from 5% to 7%.

Another key advantage of the IBC cell is its simplified connection process. With both contacts located on the back of the cell, the cells can be easily connected and placed closer together within the module. Unlike other solar cells that require spacing between contacts, the absence of space between the contacts in IBC cells allows for tighter packing and more efficient use of module space.

The IBC cell also exhibits a lower series resistance compared to other solar cell designs. This is primarily due to the larger surface area occupied by the contacts at the

back of the cell. The reduced distance between these contacts minimises the resistance encountered during the flow of current within the cell, resulting in improved electrical conductivity and overall performance.

IBC solar cells offer significant advantages over traditional solar cell designs. With reduced shading losses, simplified connection processes, and lower series resistance, the IBC cells demonstrate superior efficiency and increased power generation potential. These advancements contribute to the overall progress of solar energy technology and further establish the brand as a leading innovator in the industry.

In conclusion, Intersolar Munich 2023 proved once again to be the premier event for unveiling groundbreaking innovations in the solar energy industry. Among the prominent participants, Belinus shone brightly by introducing its revolutionary heterojunction (HJT) technology combined with butyl

technology, showcasing the remarkable Nova PV Module. This module exhibited exceptional bifaciality, resilience in high-temperature environments, and a commitment to environmental sustainability by eliminating PFAS contamination.

The company's dedication to excellence, customer-centric approach, and ambitious plans to establish a cutting-edge manufacturing facility in Belgium within the next six to eight months further solidify the company's position as a leader in the solar energy landscape. With an unwavering commitment to advancing solar technology and fostering a sustainable future, it is poised to shape the future of solar energy and contribute significantly to the global transition toward cleaner and more sustainable energy solutions.

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