

Fraunhofer ISE Pushes World Record for Multicrystalline Silicon Solar Cells to 22.3%

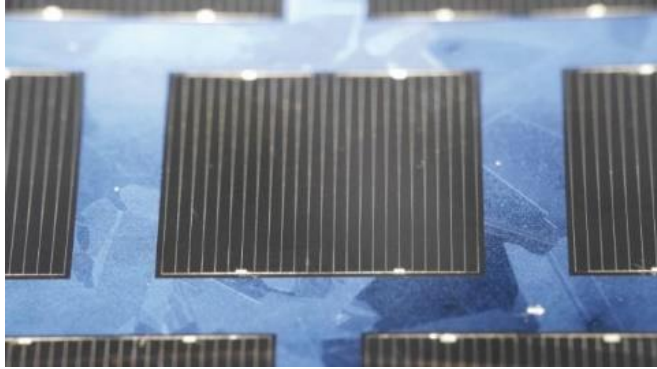


Fig : Photo of the world record multicrystalline silicon solar cell with 22.3 % efficiency (Fraunhofer ISE, Germany)

Fraunhofer is one of the world's largest applied R&D organization, with nearly 80 research units in all sectors of industry, 24500 employees and an annual outlay of Euros 2.1 Billion. Our global footprint is very strong, with offices and research centres in the Europe, USA and Asia. Some of our renowned innovations are the MP3 format, the white LED, the smallest of cameras. In the field of renewable, Fraunhofer hold the world record in solar cell efficiency, battery storage, and cover the entire spectrum of energy (Grid, Renewables, Storage, etc) across the value chain from materials to testing and certification. Fraunhofer has been active in India since the past several years, bringing innovative technologies and research competence to India. Fraunhofer in India is the chosen R&D and innovation technology partner of some of the major players in the field of Energy, Environment, Automotive, Electro-mobility, Materials, Production Technology of Government and Private Organizations.

The Fraunhofer Institute for Solar Energy Systems ISE performs applied scientific and engineering research and development for all areas of solar energy. Research and industry worldwide are working to further reduce the costs of solar electricity and Fraunhofer's research is playing a leading role. With its newest solar cell, the Fraunhofer Institute for Solar Energy Systems ISE has now exceeded its own world record for multicrystalline solar cells. The record cell converts 22.3 percent of the incident sunlight into electricity.

Multicrystalline silicon, the workhorse of the photovoltaic industry, dominates the PV module production worldwide with a market share of 57 percent. In the last few years, the efficiencies of the more expensive monocrystalline solar cells have increased greatly, thus widening the gap between mono and multicrystalline material.

At Fraunhofer ISE in Freiburg, the researchers have succeeded in decreasing this efficiency gap by surpassing their own world record efficiency for multicrystalline solar cells, which they established just a few months ago. Pushing beyond the magical threshold of 22 percent, their newest solar cell converts 22.3 percent of the incident solar energy into electricity. The researchers affirm that the maximum potential of the material and the cell technology yet to be realized.

Kindly in touch with us if you need any additional info on the subject.

Thanks and Regards,

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