

# Sharp to Begin Mass-Production of Thin-Film Photovoltaic Modules

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Sharp Corporation will introduce a new mass-production system for thin-film photovoltaic modules at its Katsuragi Plant in Nara Prefecture, and will begin operation in September of this year.

Compared to crystalline silicon photovoltaic modules, thin-film solar cell (photovoltaic) modules can be manufactured using a tiny amount of silicon, and in addition, can be used in application products that offer attractive design features such as “illuminating solar panels (Lumiwall)” where they are combined with LEDs, and see-through type solar panels that permit natural light to pass through.

In the midst of skyrocketing demand for solar cells, Sharp is aiming to further expand the range of applications, and has advanced the idea of thin-film photovoltaic modules that use crystalline thin-film tandem cells. This cell design is based a proprietary architecture that integrates amorphous silicon technology with crystalline thin-film silicon technology to boost conversion efficiency by 50% compared to existing solar cells. But demand for building materials in industrial fields is increasing, and at this time, Sharp has decided to proceed with full-scale construction of a production system with an annual capacity of 15 MW.

In the future, Sharp anticipates significant growth in demand for solar cells, and will be actively working to open up new areas of demand. In addition to currently available single-crystal and polycrystalline silicon solar cells, Sharp intends to strengthen “thin-film” type solar cells as a second pillar of our product line, and by developing such diverse line-up,

will work to achieve its corporate vision of becoming a “Zero Global Warming Impact Company.”

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