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**MITSUBISHI PLASTICS LAUNCHES “BACK-BARRIER” TO GLOBAL MARKET**  
**High Gas Barrier Back Sheet for Thinner Photovoltaic Solar Modules**

Mitsubishi Plastics, Inc.

Mitsubishi Plastics, Inc. (MPI, Tokyo, Japan; President: Hiroshi Yoshida) launched high gas barrier Photovoltaic (PV) back sheet “BACK-BARRIER” to the global market.

“BACK-BARRIER” is MPI’s latest development as one of the type of “X-BARRIER,” a series of high gas barrier films with the world’s highest level of water vapor barrier. Solar cell manufacturers, to whom the company provided samples, confirmed the product’s performance.

Since July 2008, Mitsubishi Plastics has achieved the world’s highest level of water vapor barrier properties, with  $10^{-4}$  g/m<sup>2</sup>/day and has marketed “X-BARRIER” around the world, based on the specific needs of customers. The product is now widely recognized as a superior material for solar cells and for highly advanced medical and pharmaceutical packaging.

In April 2009, “VIEW-BARRIER” was on the market, which specifically designed for use in front panels of electronic devices, including dye sensitized solar cells and organic electro-luminescence display panels that require anti-reflection, UV-cut, anti-glare, low shrinkage and process suitability, in addition to superior gas barrier performance as a substitute for glass plate.

“BACK-BARRIER” is based on four key concepts. 1) High humidity barrier to ensure both consistent generating efficiency and mechanical strength. 2) Halogen-free. 3) Metal free. 4) Easy bonding to encapsulation material like EVA (Ethylene-vinyl acetate). As a result, the product avoids the lowering of electric generation efficiency and strength of back sheet, thereby contributing to improved durability of solar cells with consideration to the environment.

MPI offers two types of back sheets. – One for crystalline silicon solar modules, requiring 0.2g/m<sup>2</sup>/day humidity barrier and one for thin PV cells, requiring 0.02g/m<sup>2</sup>/day

“BACK-BARRIER” is being developed for use in dye sensitized and organic thin film solar cells with much higher humidity barrier.

MPI expects two-year sales of five billion yen for “X-BARRIER” products, including “BACK-BARRIER.”



<Photo>: Mitsubishi Plastic's launched "BACK-BARRIER."

For further information, please contact:

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