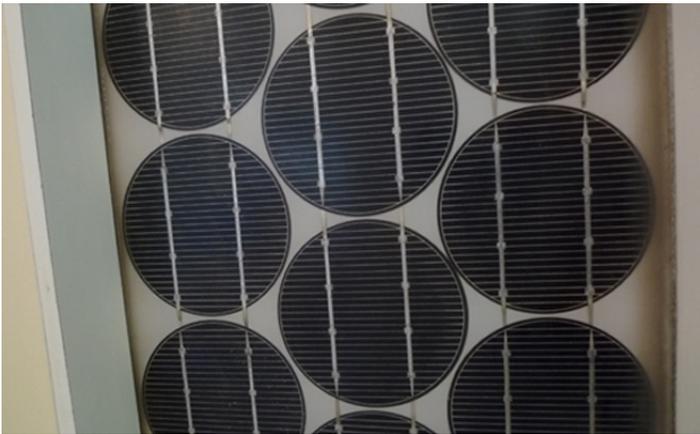


## CASE HISTORY:

### SUN EARTH SOLAR POWER COMPANY RELIES ON DUPONT® TEDLAR™ YEAR AFTER YEAR



*Sun Earth Solar module featuring Tedlar® 2000 Series film. Module is still in use and producing energy 23 years later!*

#### ABOUT SUN EARTH SOLAR

Headquartered in Ningbo, China, Sun Earth Solar Power Company Ltd. (formerly Ningbo Solar) is one of the world's leading companies in the production of mono- and polycrystalline photovoltaic (PV) modules with production capacity of 650 megawatts (MW). The company has earned a solid reputation for its technical innovation and use of advanced manufacturing processes.

Founded in 1966 as the Ningbo Solar Electric Power Company, Sun Earth Solar was the first company in China dedicated to solar cell and module production, sales, and research.

#### SEARCHING FOR IDEAL MATERIALS

According to Jianhong Zhou, general manager of Sun Earth Solar, "Throughout the years, we have been continually seeking high-quality materials to manufacture our products and have made many changes, but since adopting backsheets made with DuPont™ Tedlar® polyvinyl fluoride (PVF) film in the mid-1980s, we have never considered replacing it."

Prior to adopting DuPont™ Tedlar® PVF film, Sun Earth Solar had experimented with a wide range of materials for use as a backsheet laminate, including liquid silicone between layers of glass. "We thought silicone would be successful," said Zhou. "But numerous problems emerged. We found it difficult to remove the bubbles produced during silicone filling for large-sized cells and the filling process was not efficient enough for mass production," explained Zhou. "So we went again in search of new/improved materials."

#### PUTTING DUPONT™ TEDLAR® TO THE TEST

In the mid-1980s, company scientists obtained samples of a backsheet laminate from a testing company in the United States. At the time, they did not know that this was a laminate containing DuPont™ Tedlar®, called TPT laminate. TPT is the most popular backsheet construction and is a trilaminate (sandwich) of polyester film between two layers of Tedlar® film.

"We took this backsheet coated with a white film-like material back to our R&D facilities to test its durability, UV resistance and performance in high and low temperatures," said Zhou. "We were amazed at how effective it was and how it met our needs. Only later were we informed that it was DuPont™ Tedlar® PVF film."

Shortly after completing this battery of tests, Sun Earth Solar began using TPT laminate and DuPont™ Tedlar® as its backsheet material of choice and has been relying on it ever since.



## SUN EARTH SOLAR POWER Co., LTD.

### SUN EARTH SOLAR RELIES ON DUPONT™ TEDLAR® YEAR AFTER YEAR

#### WHY SUN EARTH SOLAR RELIES ON DUPONT™ TEDLAR®

“DuPont™ Tedlar® is distinguished in many ways,” explained Zhou. “For starters, it provides excellent UV resistance and is highly durable. Secondly, it offers superior water resistance that ensures effective exterior insulation and protects cells from water vapor erosion. Thirdly, it is reflective enough to enhance the effectiveness of solar cells.”

Zhou went on to explain that over the years, company scientists have conducted an array of tests on at least 20 types of backsheet materials of varied specifications. “The more tests we do, however, the more sure we are of the competitive advantages of DuPont™ Tedlar® film, especially in terms of durability, lifespan, water resistance and lightfastness,” said Zhou.

For Sun Earth Solar, Tedlar® is a material that matters and a point of differentiation for their company. “We believe that DuPont™ Tedlar® PVF film can guarantee a lifespan of 25 to 30 years, which is how we guarantee our solar cells,” said Zhou.



*Sun Earth Solar Power module featuring DuPont™ Tedlar® PV2000 Series PV film  
Dimensions: 1356mm x 296mm x 40mm  
Spec.: Mono c-Si  
Power output: 35W  
Produced in 1988*

Tedlar® continues to raise the standard for performance and longevity, based on a tradition of innovation, dedication and excellence. For more information about Tedlar® or other DuPont Photovoltaic Solutions:

Tollfree: 888-387-8337

International: 1-302-996-7918

Fax: 1-302-355-4056

[photovoltaics.dupont.com](http://photovoltaics.dupont.com)

For more information about Sun Earth Solar Power Co.: [www.sun-earth.com](http://www.sun-earth.com)