



# At a Glance

## Skylite Solar and Our Partners

- **Estimated annual revenue of :  
USD 17.5 \$ Billion**
- **Global Employees** : 45,000+ people,  
with 8,000 Engineers in R&D  
infrastructure
- **Global Manufacturing Operations**  
5 manufacturing facilities in 5  
countries



# Major Milestones

- BIPV Module Technology transfer was granted from ITRI
- Granted TÜV Certificate for SPV Series & BIPV Family products and launched the first solar module series with up to 230W power output.
- Granted ISO 9001 Certificate
- Manufacturing started. 1<sup>st</sup> 25MW-line production at full capacity
- Accomplished one of the world's largest BIPV Project with 1MW 8,844 solar panels for World Game Stadium Granted UL Certificate
- 2<sup>nd</sup> 25MW-line production started, annual capacity increased to 50 MW
- Granted JET Certificate and UK-MCS Certificate
- Solar Module Capacity expanded to 75 MW.
- Launch new product Smart Module in Q3
- Passed the Long-Term Sequential Test , as 3rd PV manufacturer globally.
- Solar module capacity expansion plan to 300 MW begin the mass production in Q2, 2013.



# Our PV Modules

## Materials and Structure

- **Solar Cell**

- Monocrystalline and Polycrystalline silicon-based cells, with size of 6 inch, 2 busbars or 3 busbars and the wafer thickness of 180 to 200  $\mu\text{m}$ .

- **Solar Module**

- **SPV Module** (Standard Photovoltaic) with mono and polycrystalline with silicon-based cells
- **BIPV Module Series** : G2G 、 G2B 、 Bifacial Module
- **Black Module Series**
- **Smart Module** with Tigo Junction-box solutions



## STANDARD PV MODULE

- **Up to 6x10 @ 260Wp  
Certificated module**
- **Up to 6x12 @ 320Wp  
Certificated modules**
- High efficient 6" poly or mono-crystalline Cells
- Certified materials form International suppliers
- State-of-the-art production equipment
- Higher strength with wind and snow loads guarantee up to 5400 pa.
- Module Size : 1655mm X 989mm X40mm

## BIPV MODULES

Innovative Technology (Best Design - High Quality)

- **G2G : GLASS to GLASS Solar Module**
- Up to 6x10 @ 220W TUV/UL Certified modules
- Custom Made according requirement of architects and clients
- High efficient 6" poly or mono-crystalline Cells
- Variation of cell and string space in a range of 2-40 mm.
- Higher strength with wind and snow loads guarantee up to 10,000 pa.
- Glass thickness from 3.2–8 mm.
- Multiple Certificated sizes



# BIPV MODULES

Innovative Technology - Best Design - High Quality



- **GLASS-TRANSPARENT TEDLAR Solar Module**
- Custom Made according requirement of architects and clients
- Up to 6x10 @ 220W TUV/UL Certified modules
- High efficient 6" poly or mono-crystalline Cells
- Edge Junction Box
- 4 Color Options

# BLACK MODULE



- 6" poly-crystalline Cells
- Up to 6x10 @ 225W
- Up to 6x12 @ 280W
- High efficient 6" poly or mono-crystalline Cells
- Certified materials form International suppliers
- State-of-the-art production equipment
- Higher strength with wind and snow loads guarantee up to 5400 pa.
- Module Size : 1655mm X 989mm X39mm



# 3-FOLD HIGH VALUED QUALITY

**+5**

**WATTS  
POSITIVE TOLERANCES**

**10**

**YEAR  
PRODUCT GUARANTEE**

**25**

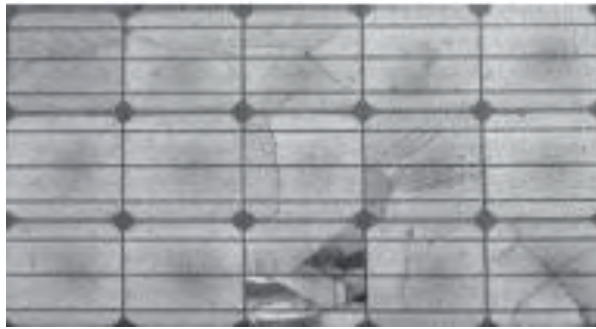
**YEAR  
POWER GUARANTEE**



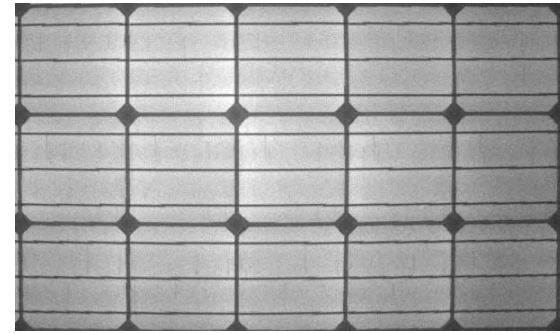
# Valued Advantages of our PV Modules

## 1 100% Electro Luminescence (EL) Testing Delivers Defect Free PV Modules

**Industry Practice**



**Ours**



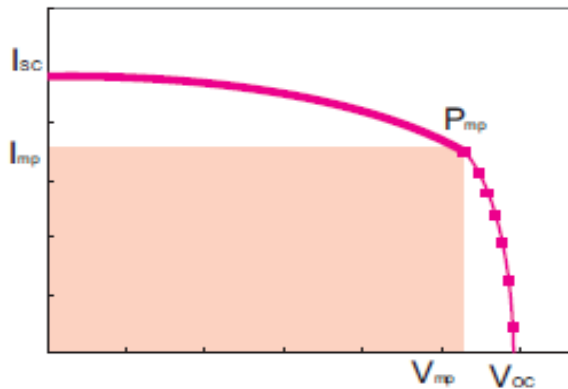
Electro Luminescence (EL) is a powerful, low intensity imaging technique to detect the potential defects such as micro-cracks and other crystallographic defects of cells, which are otherwise, invisible to the naked eye.

We **implement 100% Electro Luminescence** screening before lamination and just before packing provides longevity in use and greater power output.

# Valued Advantages of our PV Modules

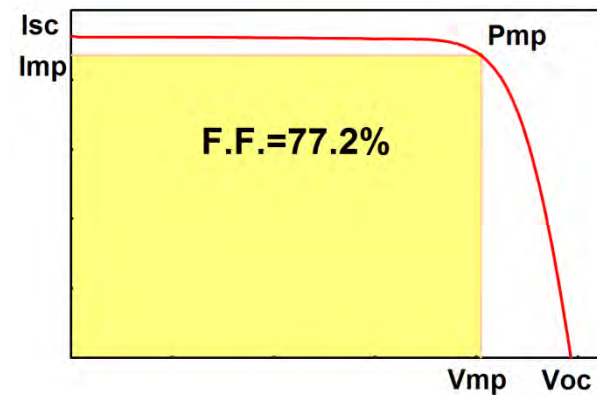
## 2 Excellent Fill Factor of Our Modules

Industry Practice



Average Fill Factor 72 – 75%

Ours



Average Fill Factor 75 – 78%

**Fill Factor** is a measure of quality of solar modules.

The use of high conductivity materials and unique design of our Solar modules outperform competitors by 3% in energy harvesting in real world installations even at low irradiance levels.

# Valued Advantages of our PV Modules

3

Accelerated Environmental Testing

## Salt Mist, and Ammonia Resistance Assured

- ***The Salt Mist corrosion test*** is carried out in accordance to 61701. The modules are exposed to high concentrations of salt mist, both continually and intermittently to simulate extreme possible exposures in use.
- ***The Ammonia corrosion test*** follows 62716 Ed. 1.0 and is carried out by TUV-Rheinland .
- **Our Modules** have received accreditation with respect to these tests. The modules can be confidently used, in even more extreme environments than the industry standard.

# Valued Advantages of our PV Modules

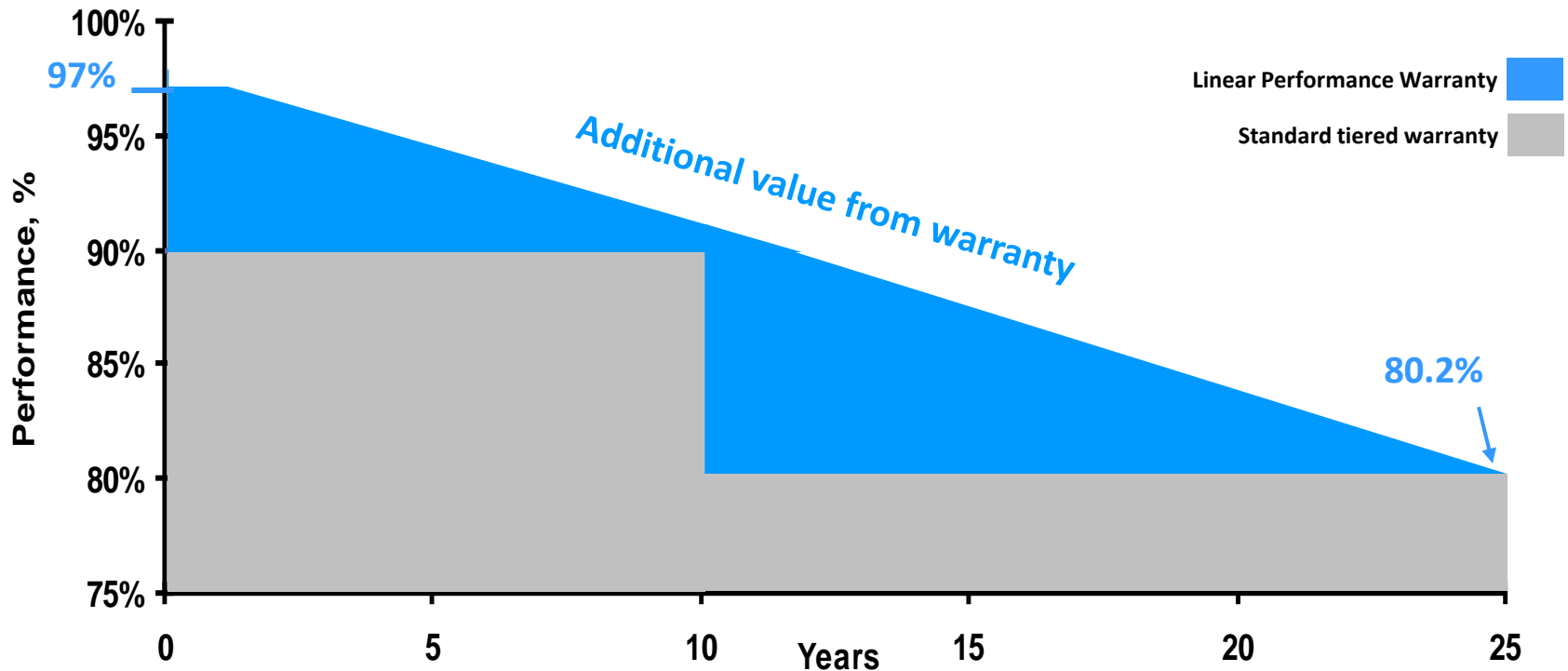
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## TUV Long-Term Sequential Testing

TEST ITEM	STANDARD	RELIABILITY TEST STANDARD
TUV Long-Term Sequential Test	DAMP HEAT : 1000 HOUR	<ul style="list-style-type: none"> <li>➤ <b>DAMP HEAT : 2000 HOUR</b></li> <li>➤ <b>THERMAL CYCLING : 400 CYCLES</b></li> <li>➤ <b>HUMIDITY FREEZE : 40 CYCLES</b></li> </ul>
PV Evolution Labs and Black & Veatch Reliability Test	THERMAL CYCLING 200 cycle  HUMIDITY FREEZE : 10 cycle	<ul style="list-style-type: none"> <li>➤ <b>DAMP HEAT : 2000 HOUR (400 hour, repeat 5 times)</b></li> <li>➤ <b>DH UNDER BIAS (PID) : DH 1000H ± 1000V</b></li> <li>➤ <b>THERMAL CYCLING : 600 CYCLES (100 cycles, repeats 6 times)</b></li> <li>➤ <b>HUMIDITY FREEZE : 30 CYCLES (10 cycles, repeats 3 times)</b></li> <li>➤ <b>MECHANICAL DYNAMIC LOAD : 1000 CYCLES</b></li> <li>➤ <b>LIGHT INDUCED DEGRADATION (LID) : 90 KWH</b></li> </ul>

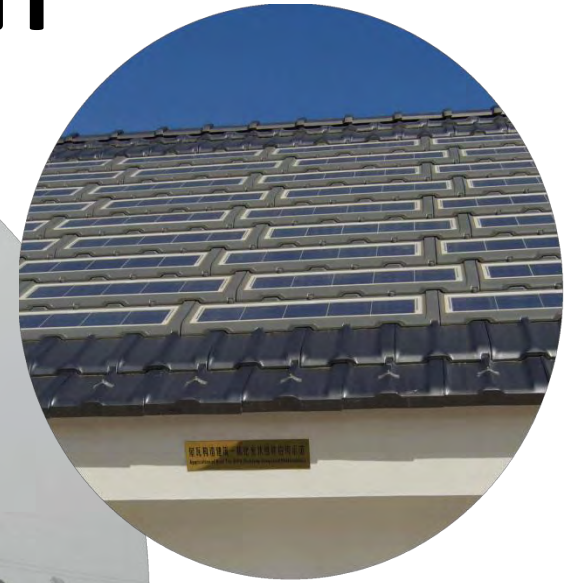
# Valued Advantages of our PV Modules

## 5 True Linear Warranty



**For Polycrystalline Products:** 3% in the first year, thereafter 0.7% per year, ending with 80.2% in the 25th year after the Warranty Start Date

# 300KW DEMO POWER PLANT



# 300KW POWER STATION



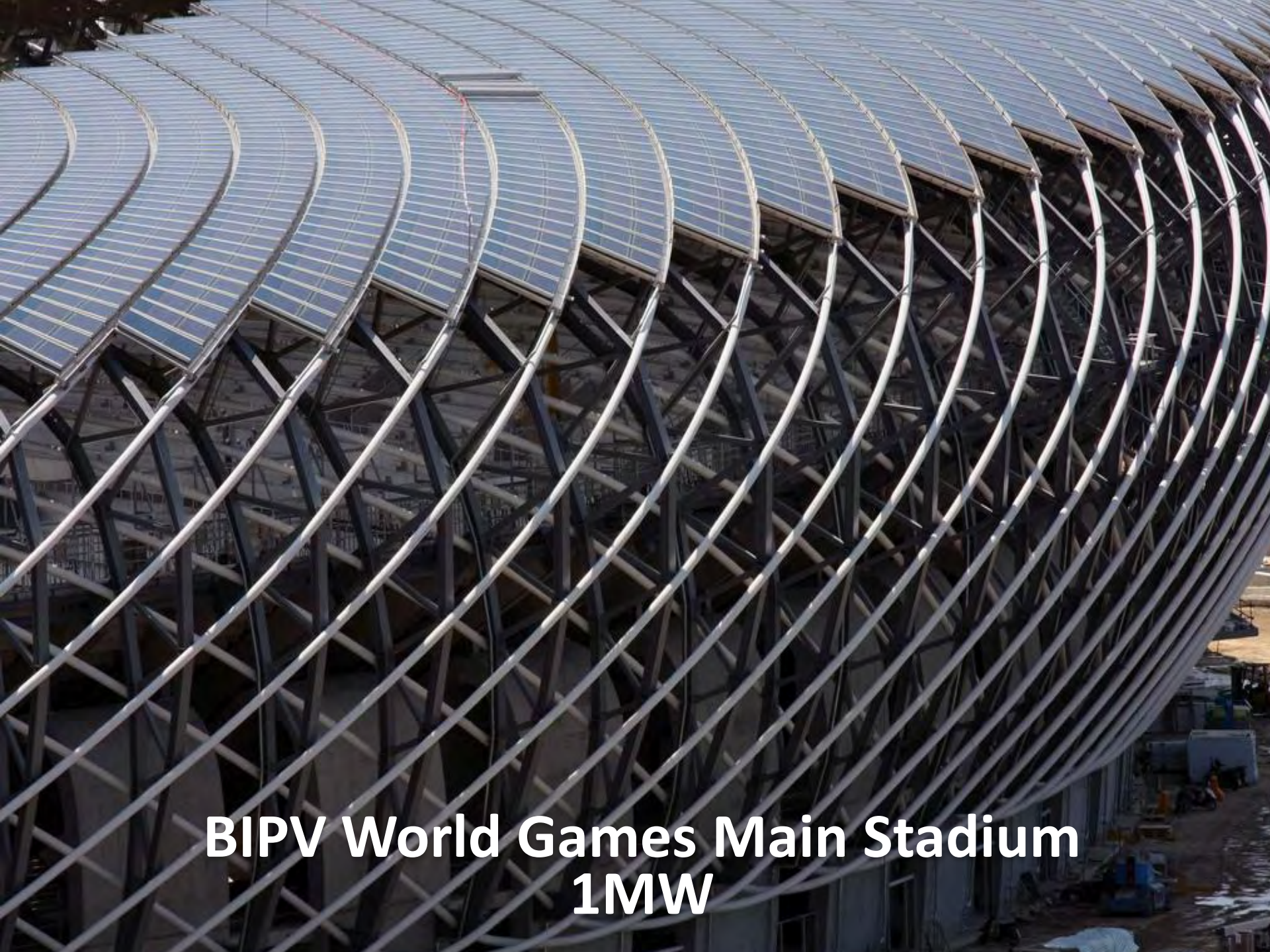


**ACHO MODULE FOR ROOF TILES**



# BIPV World Games Main Stadium 1MW





**BIPV World Games Main Stadium  
1MW**



**BIPV World Games Main Stadium  
1MW**

# BIPV SOLAR CITY PROJECT 202KW



# **BIPV SOLAR TOP PROJECT**

## 125KW Cultural Park



# BIPV SOLAR TOP PROJECT

## 125KW Cultural Park

