

# Neo Solar Power Corporation



**March 21, 2014**



# NSP at A Glance

- **Founded: December, 2005**
- **Products: cells and modules**
- **2014 Year-End Capacity:**
  - Cell: 2.12 GW
  - Module: 480 MW
- **Employee: 3,100**
- **Headquarters: Hsinchu, Taiwan**
- **Listed in Taiwan Stock Exchange**
  - **Market Cap US\$1.14 Billion at the end of 2013**
- **The world's largest merchant cell company**



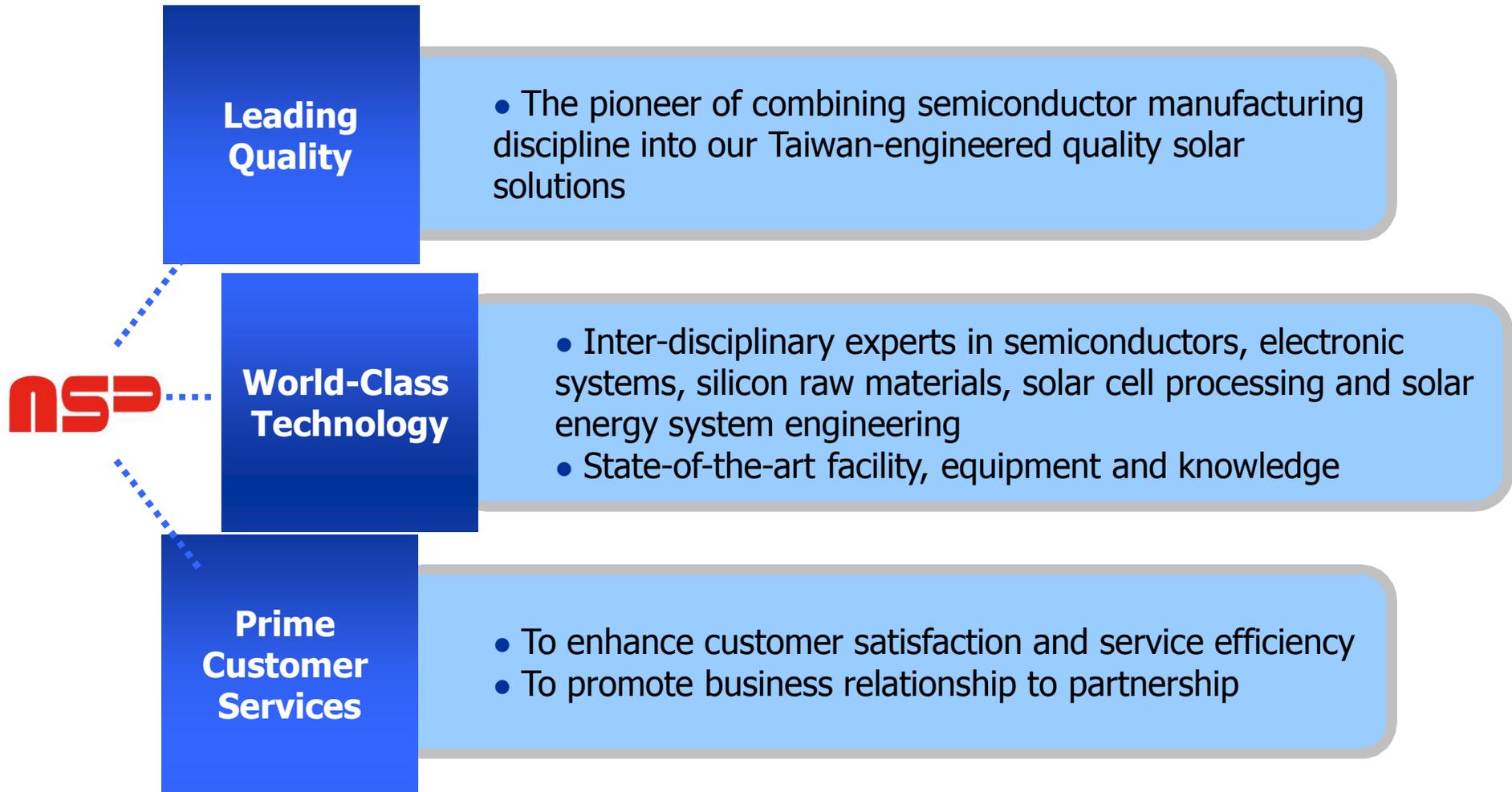
Your Best Solar Cell and Module Partner

Landscape may change, but the sun continues to shine.  
So is NSP's commitment to deliver high quality cell and module products to the world at affordable costs, no matter what.

# Milestones

- **2005.12: NSP founded**
- **2006.12: Breakeven and 100% utilization achieved**
- **2009.01: Listed on the Taiwan Stock Exchange**
- **2009.09: Ranked No. 6 in Deloitte Technology Fast 500 APAC Ranking**
- **2010.10: Launched "Super 17" (multi) & "Perfect 18" (mono) cells**
- **2011.04: Achieved complete carbon footprint verification**
- **2011.09: Launched mono cell "Black 19" at EU PVSEC**
- **2012.09: Announced "Super 18" and "Black 19+"**
- **2013.05: Merged with DelSolar to become the world's largest merchant solar cell manufacturer**
- **2013.10: Awarded "Taiwan Excellent PV Product" by the Bureau of Energy, Taiwan**
- **2013.10: Launched "Super19", "Black20" cells and "BiFi" bifacial module at PV Taiwan**

# Core Competences



# The Executives



**Dr. Quincy Lin**

**Chairman**

- 30+ years of experience in high tech management
- Senior Vice President of Taiwan Semiconductor Manufacturing Company ("TSMC")
- Honorary Chair in Management at National Chiao-Tung University



**Dr. Sam Hong**

**CEO**

- 30+ years of experience in PV solar energy
- Research Division Director of PV Solar Energy Division at the Industrial Technology Research Institute ("ITRI"); VP & Plant Director of Sinonar Solar Cell
- Chairman of Taiwan Photovoltaic Industry Association ("TPVIA")

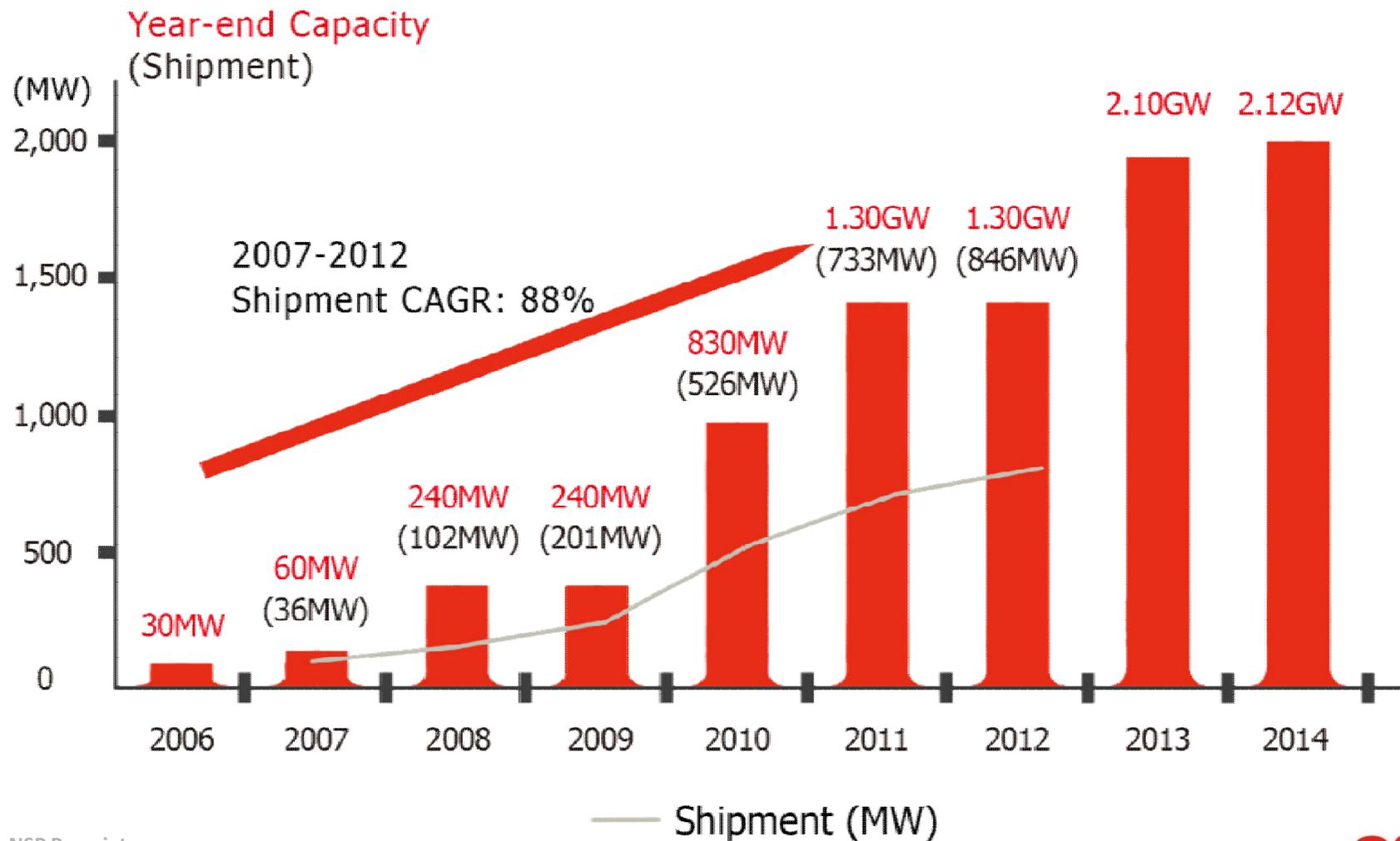


**Mr. Andy Shen**

**President**

- 30+ years of experience in semiconductor engineering, sales, and marketing
- Senior Director, TSMC
- Managing Director, TSMC-Europe

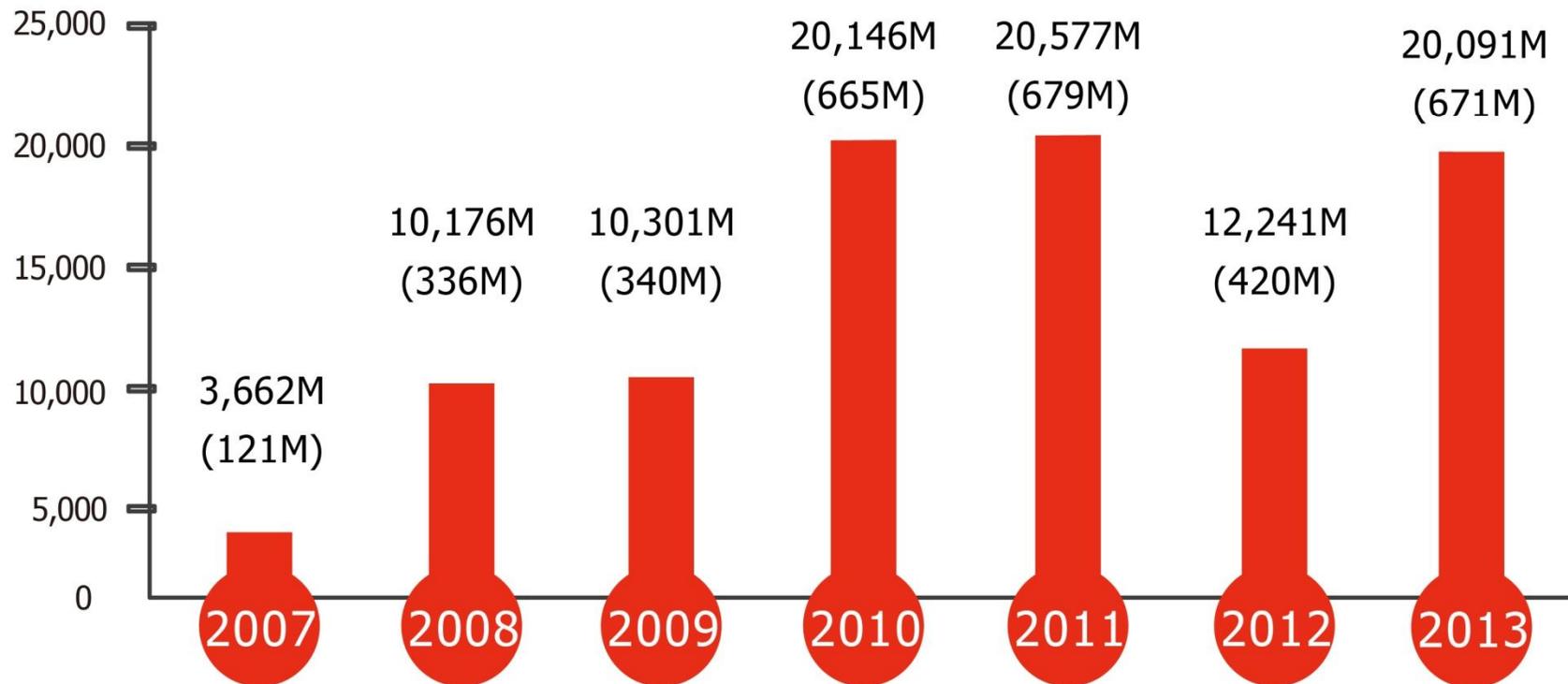
# Strong Growth Momentum



# Revenue Growth

TWD\$  
(US\$)

## Revenue



- **2012 revenue declined despite 15.4% shipment growth due to ASP erosion**

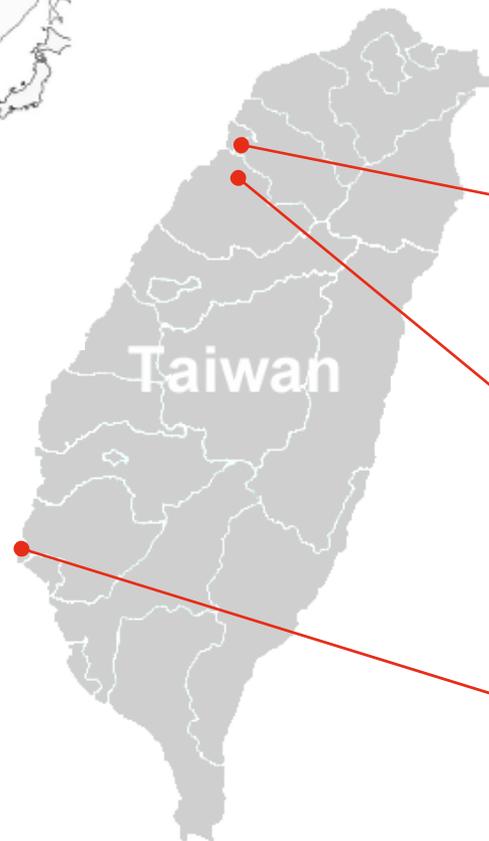
# Cell Capacity Overview



## FAB 6



Wujiang, Suzhou  
400 MW



**Total Capacity 2014: 2120 MW**



## FAB 2 & HQ

Hsinchu Science Park  
680 MW



## FAB 5

Chunan Science Park  
380 MW



## FAB 3

Tainan Tech. Ind. Park  
660 MW

# Module Capacity Overview



**FAB 52**



**Wujiang, Suzhou  
220 MW**



**Total Capacity 2014: 480 MW**



**GES (NSP Subsidiary)**

**Hsinchu Ind. Park  
60 MW**

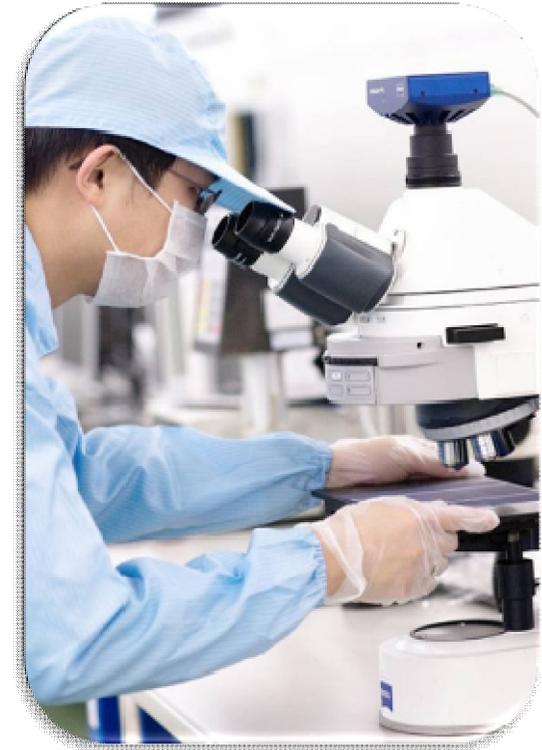


**FAB 51**

**Hsinchu Science Park  
200 MW**

# Strong R&D Capability

- **World leader in efficiency and yield**
- **Advanced characterization based on years of experience in semiconductor device physics for optimized performance**
- **Excellent manufacturability and reliability to shorten time to market**
- **Customer oriented technology road map to support advanced products and partnership**



# Proven Module Capability



- **Power tolerance of 0 to +4.99 W providing a stable, high-energy system output**
- **High PV cell shunt resistance enabling increased power output in low light conditions**
- **Low temperature coefficients of power to produce high power output in all weather conditions**
- **High efficiency solar cells and state-of-art manufacturing technology to enhance cost efficacy per kWh**
- **High wind/snow load tolerant**
- **Ammonia-resistant according to IEC 62716**

# NSP Module Features

## ● Standard Offerings



Positive power tolerance  
0~+4.99 watt



Withstand strong wind/snow load up to 5400 Pa  
Pass ASTM E330  
Maximum wind speed: 197 km/h (safety factor 3)



Excellent low light performance  
3.5% relative eff. reduction at low-irradiance (200W/m<sup>2</sup>)



Certified ammonia resistance  
According to IEC 62716 Ed. 1



Salt resistant  
According to IEC 61701 Ed. 2 (severity 6)



100% EL inline inspection  
Better module reliability



Prolonged aging test  
2000 hours damp heat test; 400 thermal cycles



Compliance with RoHS and REACH



PID resistant  
Enhanced module reliability

## ● Customized Offerings



Salt resistant  
According to IEC 61701 Ed. 2 (severity 6)

# Largest BIPV in Taiwan



- **Taiwan National Stadium, 1MW PV System, EPC by Delta, Solar cell by NSP**
- **Architect: Toyo Ito**
- **The largest building-integrated PV system in the world**
- **Annual CO2 reduction: 660 MT**
- **Annual Power Generation: 1.1 M KWpH**

# Airport PV System by GES

- **USA Indianapolis Airport, 25 MW**
- **12.5 MW completed**
- **On-grid ceremony  
Oct. 18, 2013**
- **PPA with Indianapolis  
Power and  
Light Company (IPL)**



# Thank You

**Neo Solar Power Corp.**

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[www.nsp.com](http://www.nsp.com)