



**南京大全新能源有限公司**  
NANJING DAQO NEW ENERGY CO.,LTD.

Providing Global Solar Energy and Solutions

**2014 COMPANY PROFILE**

# Daqo Group Introduction

Daqo Group is one of largest enterprise nationwide, headquarter in Yangzhong, Jiangsu province, found 48 years ago, and 100% privately own. In 2013, Daqo Group had a revenue of over 1.9 billion USD , with 10000+ employees worldwide. Over 40 companies (including 7 joint ventures with Siemens, Moeller, Eaton, Secheron, Nkt, etc.)





# Daqo Group – 3 Industry Sectors



Electric equipment – Yangzhong, Jiangsu, Daqo's traditional business specializing in mid/low voltage electrical systems including switchgear boxes, transformers, bus lines and system components . Rank #2 in the field.



Renewable Energy - Manufacturing and sales of PV products such as polysilicon, silicon ingots/wafers, solar cells ,solar modules, solar inverter ,mounting system .etc,



Transportation - Nanjing, Jiangsu, Design and manufacturing electric equipments and spare parts for the burgeoning Chinese high speed rail (HSR) network

## Joint Ventures

SIEMENS

EATON

MOELLER 

 Sécheron

FISA · BABCOG

Schneider Electric 

nkt cables 



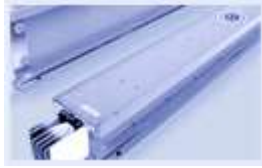
# DAQO Group – Diversification

## 23 Subsidiaries

## Thousand of products



Switch Equipment



Low Voltage System



Power Transmission



Cubic-type Substation



Electrical Components & Automation



Renewable Energy & Investment



High Voltage Closed Busbar



Power System Automation



Railway Traction Equipment



Transformer



Environment Protection Technology



Cable Tray



High Voltage System



Intelligent low-voltage distribution

- Heavy diversified
- China's TOP 500
- National key high-tech enterprise
- National electrical inspection station
- State-level enterprise technical center
- Chinese electrical industry leader enterprise
- Chinese Machinery Industry Top 100 enterprise
- National postdoctoral scientific research workstation
- National 863 Program CIMS demonstration enterprise
- No.1 enterprise where innovation is priority in Chinese electric industry
- Ministry of Science & Technology 863 National Achievement Industrialization Base



# DAQO Group Project Reference



Three Gorges Projects



Guangzhou Subway Line



Tian An Men Square Project



Shanghai New World Center



Da Yawan Nuclear Power Station



Yangzi Petrochemical Plant



Ethiopia GIBE 3 Hydro PP



Turkey Obruk HPP



Arak TPP in Iran



Emirates Headquarter



Vietnam Hydro Power Plant



Dubai National Art Gallery



# Leadership & Technical Team



**Guangfu Xu**  
Chairman



**Xiang Xu**  
President  
CEO



**Gongda Yao**  
Director & CEO  
Poly



**ZhiXiang Chang**  
GM  
Module



**Tracy Zhou**  
CMO  
Poly



**Dr. Heinz-Ulrich Gogrew**  
Vice President of  
Daqo Group AG  
*More than 10 years of experience in  
PV module manufacturing and  
development  
Lead engineered more than 15MW  
of PV projects in Europe*



**Lars Haffmans**  
Sales & Marketing  
Daqo Group AG  
*5 years of experience in PV business  
and PV projects in Europe*

## Professional & Experienced R&D

- International R&D team based in Germany and China
- Collaborative relationships with third party suppliers
- Cooperative relationships with reputable institutes and colleges
- First-class in-house laboratory



# Company Milestone



**2010**

Mass Production of 250MW solar panels  
Establishment of DAQO Europe

**2010**

DAQO New Energy's Initial Public Offering  
- Listed on the New York Stock Exchange  
(NYSE: DQ)

**2011**

- 250MW cells manufacturing commission
- 250MW wafer manufacturing commission
- 250MW ingot manufacturing commission

**2012**

Establishment of Xinjiang DAQO New Energy, expansion of polysilicon production to 7300MT



**1965**

Establishment of DAQO Group

**2007**

Establishment of DAQO New Energy

**2008**

Operation of 9N grade polysilicon

**2009**

Establishment of DAQO New Energy North America

**2009**

Established the Smart-automatic production line of solar panel





## Daqo New Energy Corp. – IPO (NYSE: DQ)

- Successfully listed on New York Exchange under DQ on 10/07/2010
- Allow us to further expand our production







# Daqo Position in PV Food Chain

Vertical Integration



**Polysilicon**  
7300 MT Capacity



**Ingot**  
250MW Capacity



**Wafer**  
250MW Capacity



**Cell**  
250MW Capacity

Horizontal Integration



**Racking**



**Inverter**



**Module**  
250MW Capacity



**Solar System**



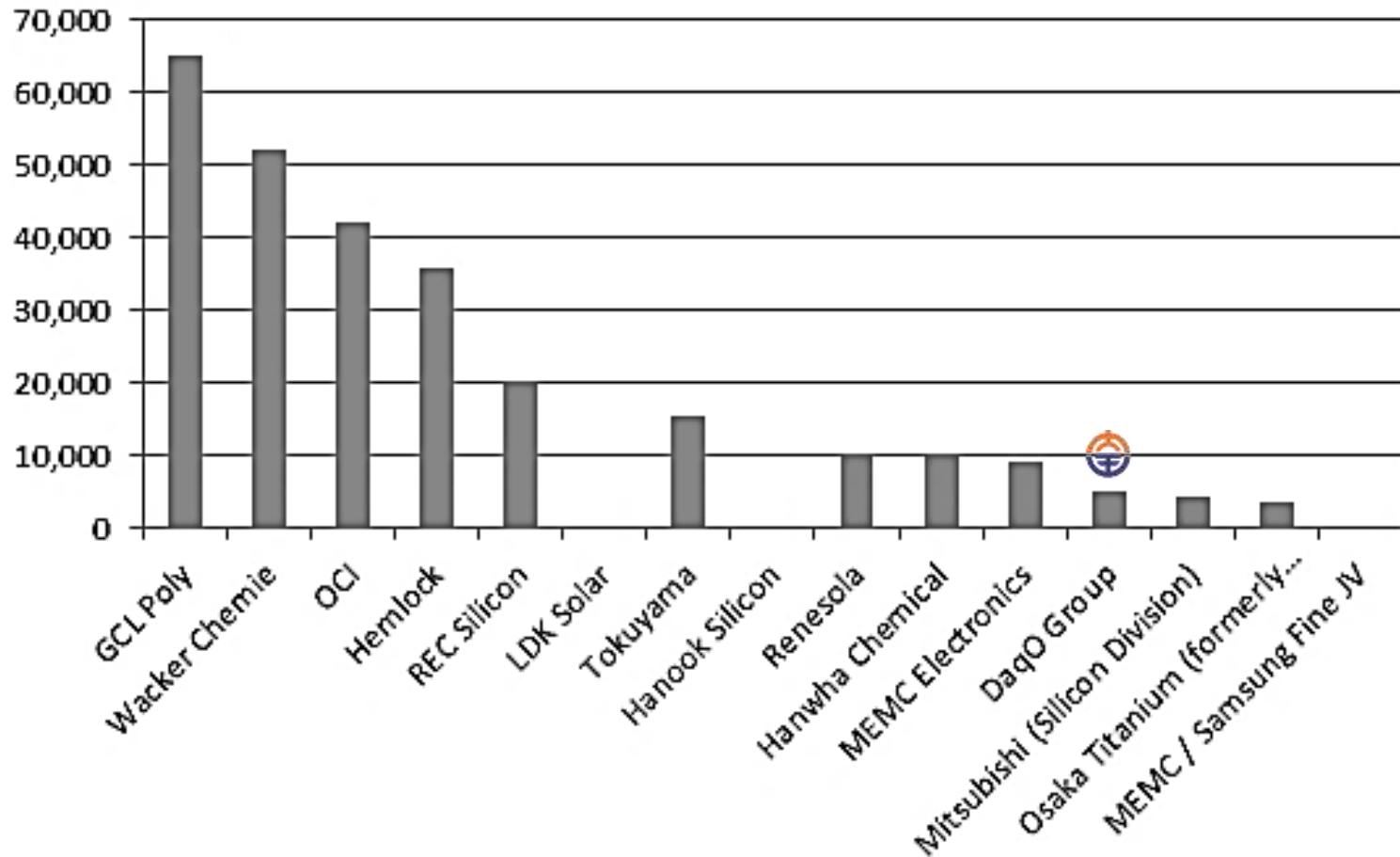
•Vertical integration and economy of scales make us secured supply, stable quality, and remain cost competitive.

•Horizontal integration and well finance offer us more marketing channel and stable development with competitive edge.



# Company Overview – Global Ranking

Global Top 10 Integrated Solar Player by 2013





# PV FOOD CHAIN: Poly-silicon

- Commercial production in July 2008
- Leading polysilicon manufacturer based in China, best cost structure and quality
- Production output of **7,300MT**
- Closed loop, modified Siemens manufacturing process
- More than 95% of products meet solar grade 1 and 75% meet semi grade per National Std

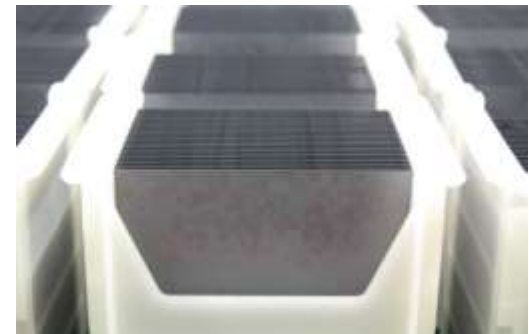




## PV FOOD CHAIN: Ingot/Wafer Plans

Ingot/Wafer	2011	2013	2015
Capacity (MW)	125	300	1000

- Locate at Wanzhou, Chongqing
- Production ramping up from March of 2011
- Automatic/reliable equipments (GT, MB, HCT, ATM, Semilab et al)
- Fully automatic 100% wafer inspection
- Advance management system - ERP/MES





## PV FOOD CHAIN: Solar Cell Plans

Solar Cell	2011	2014	2015
Capacity (MW)	125	300	750

- Locate at Yangzhong, Jiangsu
- Production ramping up from April of 2011
- Most advanced cell lines: selective emitter, double printing, automatic upload/download
- Target cell efficiency of 19.0% (multi), 19.7% (mono)
- Advance management system - ERP/MES





## PV FOOD CHAIN: Solar Module Plans

Solar Module	2011	2014	2015
Capacity (MW)	150	250	500

- Located at Nanjing, Jiangsu
- Entered production May 2010
- 250MW automatic manufacture lines
- Certified with TUV, CE, UL/CUL, Cal. CEC, Australia CEC, UK MCS, Golden Sun, and ISO9001, ISO14001





# Solar Module – Product Portfolio

<b>DQxxxMSD</b>	<b>DQxxxMSC</b>	<b>DQxxxMFA</b>	<b>DQxxxPSB</b>	<b>DQxxxPSC</b>	<b>DQxxxPSD</b>
<b>Mono</b>	<b>Mono</b>	<b>Mono</b>	<b>Poly</b>	<b>Poly</b>	<b>Poly</b>
<b>Black frame available</b>	<b>Black frame available</b>	<b>Black frame available</b>	<b>Black frame available</b>	<b>Black frame available</b>	<b>Black frame available</b>
Output up to <b>325</b> Watt	Output up to <b>270</b> Watt	Output up to <b>210</b> Watt	Output up to <b>235</b> Watt	Output up to <b>255</b> Watt	Output up to <b>315</b> Watt
72 of 156*156mm cells	60 of 156*156mm cells	72 of 125*125mm cells	54 of 156*156mm cells	60 of 156*156mm cells	72 of 156*156mm cells





# Solar Module – Materials

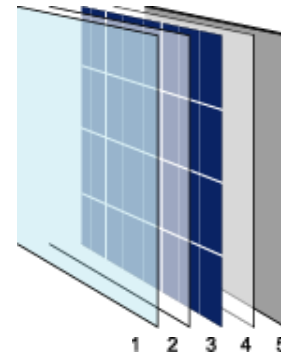
DAQO solar modules start with excellent materials.

- ◆ **High efficient, high reliable solar cells** which came from DAQO High quality 9N polysilicon ensure our product output stability
- ◆ **Advanced EVA** encapsulation system with **triple-layer back sheet** meets the most stringent safety requirements for high-voltage operation
- ◆ **Junction box** also provides user with safety, swift and reliable way to connect, and it has approved TUV certificates and IEC61215 testing.

Long-term strategic corporation and agreement with our partner to ensure high performance materials for DAQO Modules



**DAQO SOLAR**



**DNP**  
Dai Nippon Printing Co.,Ltd.

**TOYO**



**Tyco Electronics**





# Solar Module – Certifications

Leading Manufacturing and Quality - Proven from Third Party Experts



**PID** Free(TUV TAIWAN)

**Fire** Test approved (TUV JAPAN)

**Salt Mist** approved (TUV TAIWAN)



**Photon**



# Solar Module – Manufacturing

## ■ EQUIPMENT (Automation)

- Automatic machines: Cell sorter, laminator, framing machine, gluing machines
- Module Assembly at **Komax Solar Automation**
- String assembly Module layup String inspection – EL and IV Busing
- Pre- and post-lamination inspection – EL and sun simulation IV curves

## ■ QUALITY CONTROL

- IQC - Automatic Bucinni cell sorter
- IPQC - (100%, in-line EL inspection)
- OQC - 100% final test with **Berger Sun simulator**

BERGER



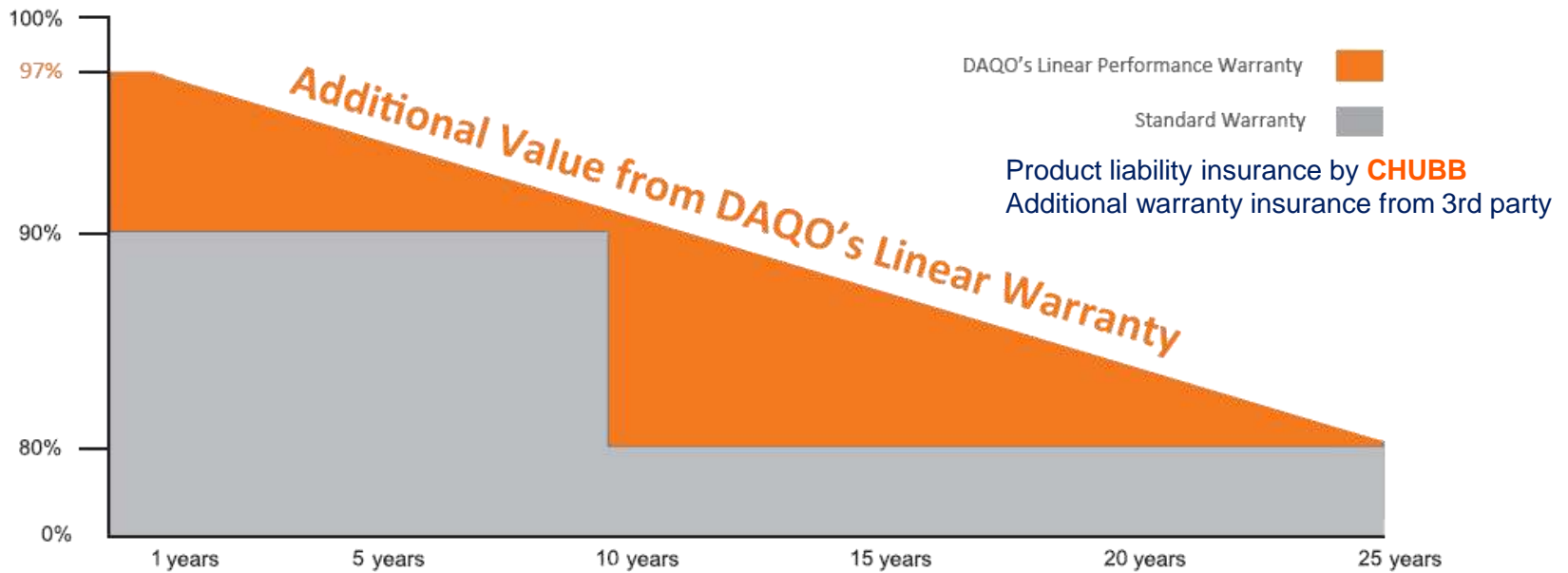
**komax**SOLAR





# Solar Module – Reliability

First year output  $\geq 97\%$  | From 2-24 year actual output decline every year  $\leq 0.7\%$  | 25<sup>th</sup> year actual output  $\geq 80\%$

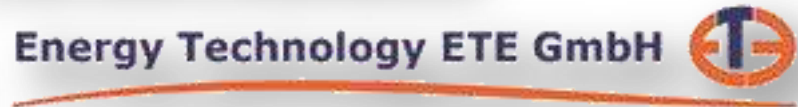
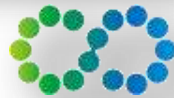




# Solar Module – Partners

## Marketing Channel- Long Terms Partners

We believe that we will be more excellent by cooperating with excellent partners.



## DAQO Investment-Financial Solutions

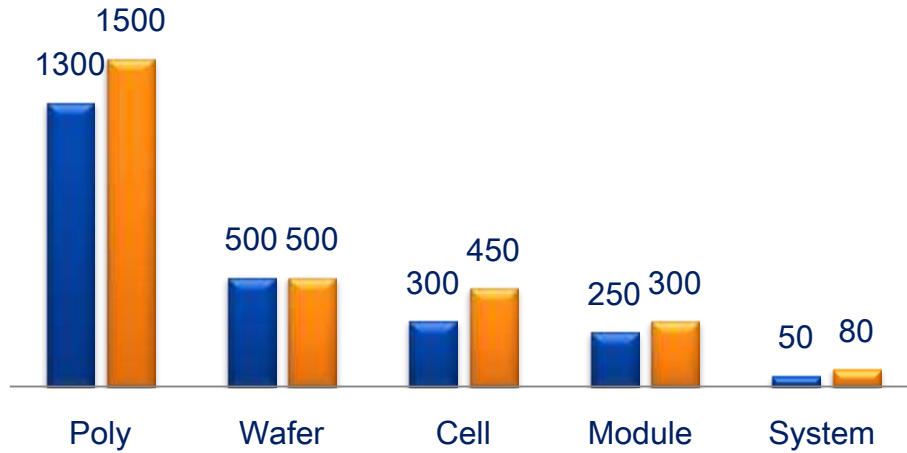




# Outlook

■ 2014 ■ 2015

## MW Reasonable Production Expansion



Design



Financing



Supplying



EPC



## Globally DAQO

Global Thinking, Local Caring



# Solar Module – Reference



• More..... [www.daqosolar.com](http://www.daqosolar.com)



Thank You!