

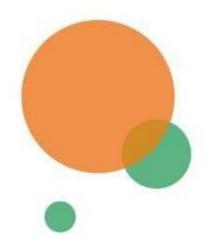
# **Presentation Prepared Exclusively for**



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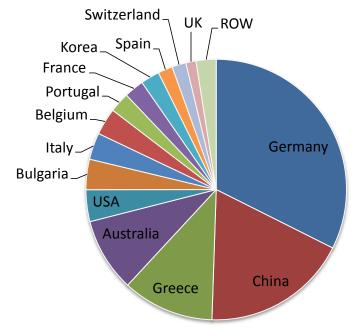


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## **Corporate Overview**



- China-based low- cost solar equipment manufacturer.
- Founded in 2005.
- Listed on NYSE (ticker: SOL).
- 2012 Global Highlights:
  - \$1B revenue.
  - 713 MW module shipment (up 154% YoY).
  - 1.5 GW wafer shipment (up 47.5% YoY).
  - 2.2 GW shipment (up 70.6% YoY).
  - ~30 MW modules sales in US.
- 2013 Full-Year Guidance:
  - 1.6-1.8 GW module sales WW.
  - >1.2 GW module production in China.
  - >500 MW regional manufacturing.
  - ~3 GW modules installed WW.
  - ~300 MW modules sales in US (1<sup>st</sup> full year of operation).

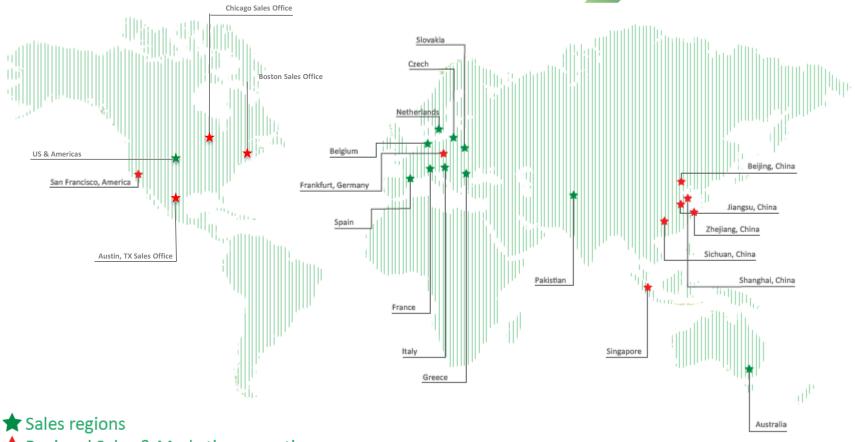


**Geographic Diversification** 



## **Global Presence**





Regional Sales & Marketing operations Production in Zhejaiang, Jiangsu, Sichuan

8,500 employees strong



#### **Desirable Place to Work**

- Corporate Structure
- **Environmentally Responsible**: ReneSola invests more than USD 9 Million every year for best practices.
- Local Labor: Chinese employees are motivated by similar values as US employees such as higher pay, desirable hours, paid time off, and perks including companysponsored parties, housing allowance, etc.
- Better Retention: ReneSola has a lower turnover rate than the city average including competitors due to the positive reputation and compensation package.

"The operator turnover rate is lower than the city average due to the positive reputation and desirable wages provided to ReneSola employees."

- Dr. Ralph Romero, Black & Veatch











- ReneSola awarded BNEF's Tier-1 ranking
- Stringent listing requirements
- Large projects financed by major banks

ReneSola Jiashan Ingot & Wafer	China	ReneSola Ltd
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ReneSola Meishan Polysilicon	China	ReneSola Ltd
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Renesola Jiashan PV Ingot & Wafer	China	ReneSola Ltd
Renesola Yixing Cell & Module	China	ReneSola Ltd
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- ➤ Leading global solar research firm awards score of **91 out of 100** for ReneSola audit.
- Only 5% of the factories audited by Accelios achieve "Tier 1" and "Bankable," minimum score of 85.
- Audit included business, products, manufacturing, marketing, after sales service, long term sustainable business development.
- Audit included North America production lines: cell sorting, assembly, quality control, and product testing.



#### Financial Strength

## **Financially Disciplined**

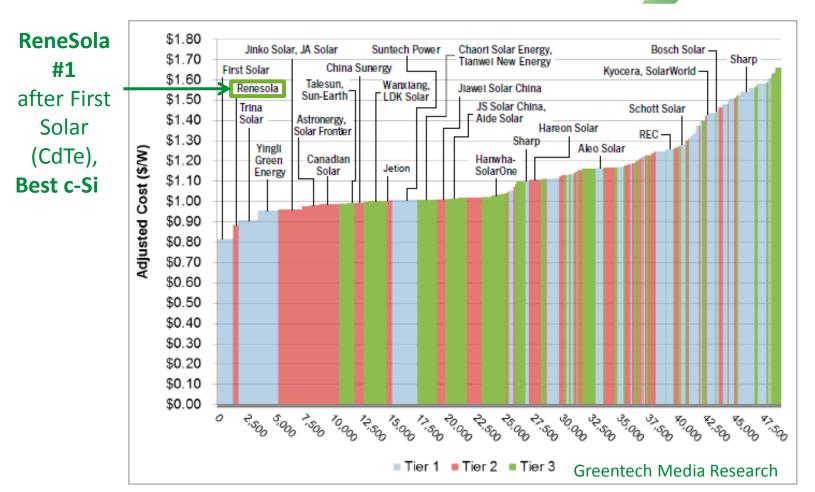


- ✓ Pristine Credit: ReneSola is the only PV module manufacturer with the highest and perfect AAA rating from SinoSure, China's largest and only policy-oriented export credit insurer.
- ✓ Prudent Debt Management : ReneSola decided to pay down debt while the competition expanded production capacity and accumulated more debt.

- No expensive sports sponsorships, celebrity spokespeople, etc. We focus instead on high-impact customer appreciation events, tours, and comarketing opportunities.
- ✓ Warranty Reserve: 1% reserve set-aside from all revenue. No warranty claims in 2 years. Only 8 claims since 2010, including 11 modules with visual defects, 1 module broken during shipping, 1 pallet damaged in shipping, and 1 barcode scanning failure.

"ReneSola has one of the **better balance sheets** amongst the Chinese solar companies. Despite being present in the capital intensive part of the supply chain, ReneSola's debt/equity ratio is roughly equal to the average for the group. The company **wisely used money earned** during the 2010 solar boom, to **reduce debt**. Solar companies at that time were generally going crazy in expanding capacity."

## **Leading Cost Structure**



<sup>&</sup>quot;ReneSola has the **best existing cost structure in the industry** and has made aggressive investments in internal steel wire saw production and cast mono ingot growth."



## **Committed to R&D Spending**

Financial Strength

#1 in China, #4 WW

R&D Ranked	2007	2008	2009	2010	2011	2012	Market Ranked 2012
1	REC	REC	First Solar	First Solar	First Solar	First Solar	2
2	First Solar	First Solar	REC	REC	SunPower	SolarWorld	N/A
3	Suntech	SunPower	SunPower	SunPower	REC	SunPower	9
4	SolarWorld	SolarWorld	Suntech	Suntech	ReneSola	ReneSola	N/A
6	SunPower	Suntech	Yingli Green	ReneSola	Yingli Green	REC	N/A
6	Hanwha SolarOne	Rene Sola	ReneSola	SolarWorld	Trina Solar	Yingii Green	1
7	Trina Solar	Yingii Green	SolarWorld	Yingli Green	Suntech	Trina Solar	4
8	Yingli Green	JA Solar	JA Solar	Trina Solar	SolarWorld	Suntech	3
9	ReneSols	Trina Soler	Trina Solar	JA Solar	Canadian Solar	Hanwha SolarOne	10
10	Canadian Solar	Hanwha SolarOne	Hanwha SolarOne	Hanwha SolarOne	Hanwha SolarOne	JA Solar	8
11	JA Solar	Canadian Solar	Canadian Solar	Canadian Solar	JA Solar	Canadian Solar	5
12	Jinko Solar	7					

"Wafer technology investments at ReneSola also dominated R&D activities and are expected to continue but also include the development of its Virtus wafer/cell and module offerings."

- PV Tech

Largest R&D budget among China-based manufacturers



## **Global Financing Partners Trust ReneSola**





Projects proudly financed by global partners



## **US Financing Partners Trust ReneSola**





Quickly gaining approval from additional US banks, financiers, and IPPs



## **Expanding US Operational Capabilities**



"I am excited to welcome ReneSola, a leading manufacturer of solar panels that uses innovative, cutting edge technologies, to the 'Innovation Capital of the World.' Companies like ReneSola are growing our economy and driving job creation."

- Mayor Ed Lee, San Francisco



## **Substantial US Module Shortage**

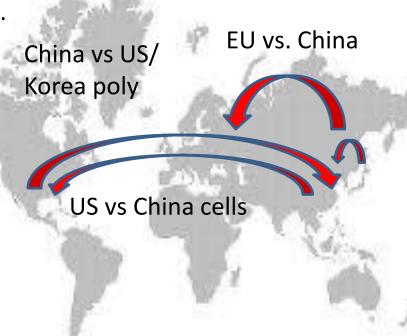
#### **US Supply Chain Issues**

- Rising ASP.
- Longer lead times and delivery failures.
- Supplier consolidation and market exits.



#### **Macro-Economic Causes**

- China-based product restrictions due to trade wars.
- Manufacturers dedicating production capacity to high ASP markets such as Japan, Australia, etc.
- Upstream suppliers requiring prepayment and longer lead times
- Supplier consolidation





#### The ReneSola Difference



Robust access to non-China cells and commitment to support and grow with our US clients

#### ReneSola Polysilicon

- ✓ Best in class cost at \$15/kg.
- √ 10,000 MT annual.
- ✓ China vs US/Korea polysilicon tariff-free.

#### **ReneSola Wafer**

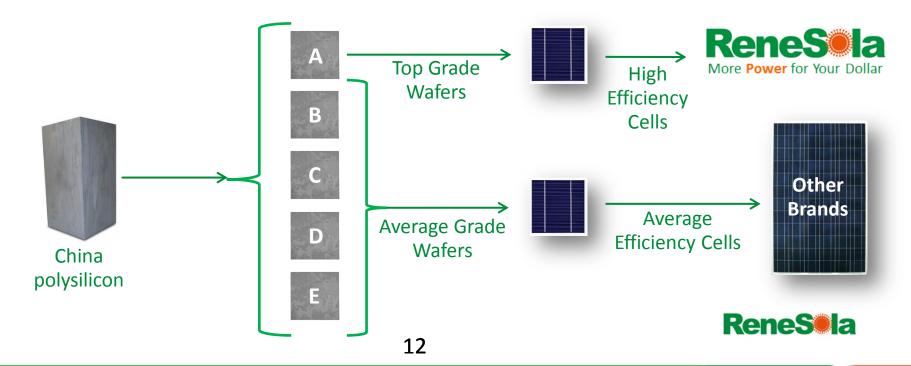
- √ 2<sup>nd</sup> largest manufacturer WW.
- ✓ Already supplying to top cell manufacturers for many years.

#### **Non-China Cell Tolling**

- ✓ Converted top wafer non-China customers to cell tolling partners.
- ✓ US tariff-free.

#### **Modules**

- ReneSola produces the highest quality modules for its US clients.
- ✓ 91% PTC rating.



#### Company

### **Top Customers Choose ReneSola**



















































#### **Full Module Product Lines**





- ✓ 60-cell poly
- ✓ 250-260 W
- ✓ Up to 16% efficiency
- ✓ Available with black frame
- √ 1000V certified



- √ 60-cell Square Mono
- ✓ 260-270 W
- ✓ Up to 17% efficiency
- ✓ Greater Power Density
- ✓ Attractive Appearance



- ✓ 72-cell poly
- ✓ 300-310 W
- ✓ Up to 16% efficiency
- √ 1000V certified





## **Diversified Product Offering and Innovation**







- ✓ ReneSola micro-inverter
- ✓ Maximum power output
- ✓ >99.5% MPPT efficiency
- ✓ 208V and 240V
- ✓ Priced 15-20% lower than name brand microinverters



#### **Under development:**



**Energy Storage** 



**String Inverter** 



72-cell Mono

...and much more.

Well-positioned product portfolio to rapidly gain market share.

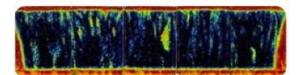


## **Disruptive Expertise in Material Science**

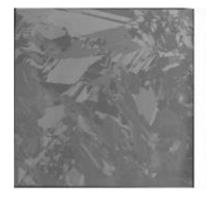


#2 wafer manufacturer in the world offering best performance



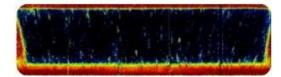


Conventional multi-ingot

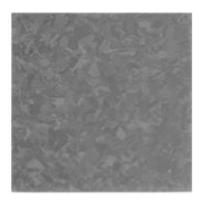


Multi wafer





Virtus<sup>®</sup> II ingot



Virtus® A++ wafer

Uniform wafer grain structure leads to greater production resulting from lower temperature coefficients

ReneSola leverages its best wafers in its own modules



## More kWh Per kWp With Higher Wafer Quality



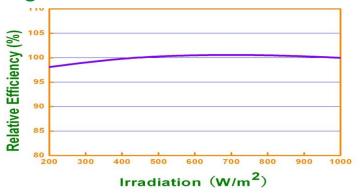
Module-level benefits resulting from superior material

#### **PID-Free**



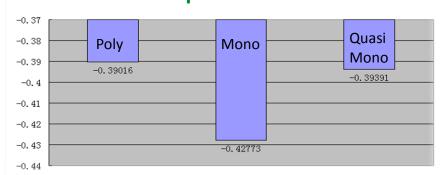
 ✓ TUV Certification issued for PID at 85° C & 85%RH condition

#### **High Performance in Low Irradiance**



- ✓ Good Linearity of Pm as function of irradiation
- ✓ High relative efficiency at >98%
- ✓ Better performance during sunrise and sunset

#### **Lower Temperature Coefficient**



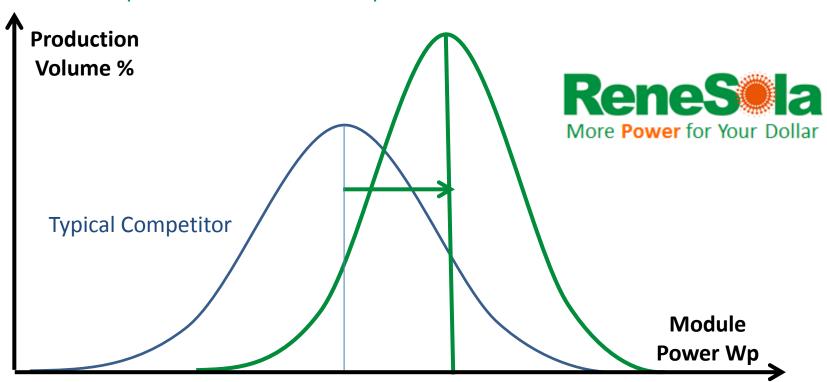
- ✓ Greater output in tropical regions
- $\checkmark$  As low as -.39%/° C
- ✓ Supported by TUV



## **Higher Average Power Modules**



Focus on the upstream material and reap the rewards



"ReneSola has done a **remarkable job** increasing and improving module efficiencies with its **wafer technology**, an **innovative approach** considering others are focused on improving efficiencies through cell technology."

- Steve Hogan, EVP and General Manager, Spire Corporation





# ReneSola scores First Place out of 170 modules from 100 competitors

- ✓ Complex and highly accurate real-life 1-year long field test concluded on October 2012
- ✓ More than 200,000 solar professionals rely on Photon Lab's test results for critical project decisions
- ✓ Performance Ratio of 98.9%



**Photon** test site Aachen, Germany

"We congratulate ReneSola on its **outstanding performance**. The Company's success reflects the R&D achievements of Chinese module manufacturers competing at the **forefront** of the solar industry."

 Mr. Qingke Xiang, Module Test Project Manager, PHOTON

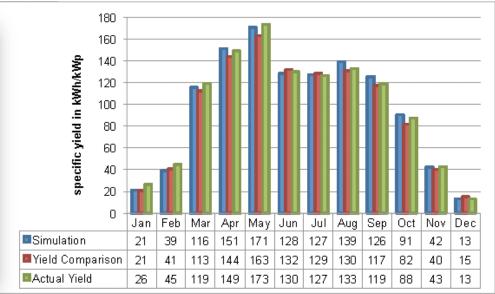


## meteo | control Validated Field Data



2011	Simulation	Median	Actual
Performance Ratio	85.4 %	82.8 %	85.5 %





$\mathbf{m}$	meteo	control
	Energy & We	ather Services

	2011				2012		
_	SEPTEMBER OCTOBER NOVEMBER DECEMBER				JANUARY	FEBRUARY	MARCH
PR [%]	-	-	-	85,66%	86,67%	80,17%	86,11%
Energy Produced [KWh]	-	-	-	76.169	87.508	77.950	146.772

	2011					2012	
_	SEPTEMBER OCTOBER NOVEMBER DECEMBER				JANUARY	FEBRUARY	MARCH
PR [%]	-	-	-	81,74%	84,17%	81,37%	87,37%
Energy Produced [KWh]	-	-	-	75.067	85.946	71.165	152.049



#### **Black & Veatch Validated Field Data**





## 14.4 MW Multiple Array Project - Italy

- √ 11 systems
- ✓ Generated more power than competition
- ✓ Lower thermal loss than the competition at -.29%/°C
- ✓ Confirmed significantly more power generation in low-light conditions

"Black & Veatch was presented with summary system performance data for 11 systems in Italy representing **more than 14.4 MWp** of Renesola modules. The systems were connected to the grid in 2011. The performance summary appears to indicate that the systems are **performing as Renesola expected**."

- Dr. Ralph Romero, Black & Veatch



#### **Customer Validated Field Data**





### 1.821 MW Project

✓ Cherichio (Abruzzo)

	2011				2012		
	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH		
PR [%]			86,27%	80,22%	84,48%	88,46%	86,84%
Energy Produced [KWh]	315.734	246.172	184.972	122.136	163.932	181.226	292.833

"We installed numerous module sizes in a series of solar farms in Italy and Spain. Based on monitoring data we've recently collected, the system is performing as well as expected; even exceeding our expectations in some cases. When ReneSola says its modules offer more power for the dollar, it's the truth. We are very pleased with the modules and excellent service. And we are looking forward to working with the ReneSola team again in the future."

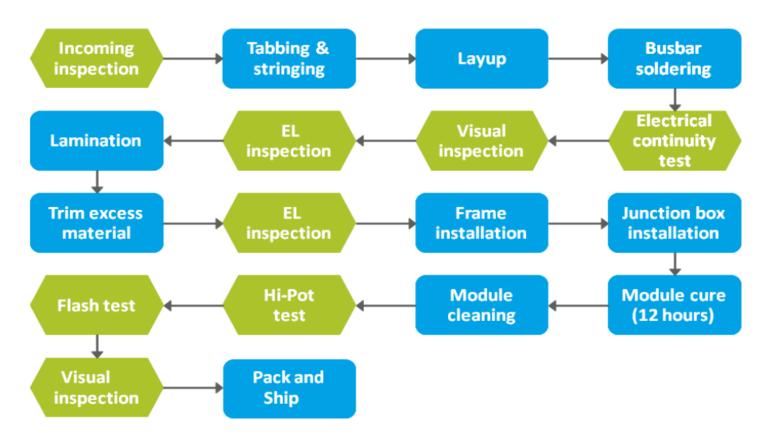
- Felipe Enrique Blanco, CEO, Rios Renovables Group S.L.



## **Black & Veatch Audited Quality Control**



Strict adherence to UL1703, IEC61215 and IEC61730 standards:



"ReneSola has a well-equipped laboratory in house for cell and module testing."

- Dr. Ralph Romero, Black & Veatch



## **Open Door Policy to Clients & Partners**









"As a project developer, our concerns are price, product quality and reliability, predictability of delivery, and service and product support. Recently, we had the opportunity to visit the manufacturing facilities of ReneSola. We found them to be of the highest quality. We have vetted numerous manufacturers, and believe that ReneSola has the performance characteristics that we need, and the ability to deliver and provide product support as promised. We look forward to working with the ReneSola team on our next project."

- Bob Grant, President, CRL Solar, LLC

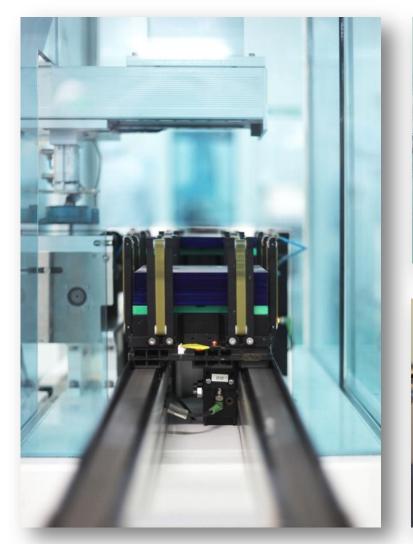


**Photo Credit: Clients** 

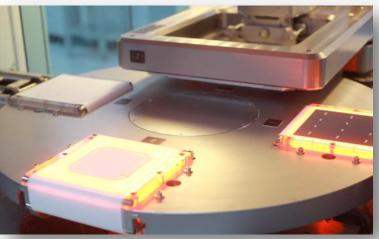


# **World-Class Manufacturing Equipment**









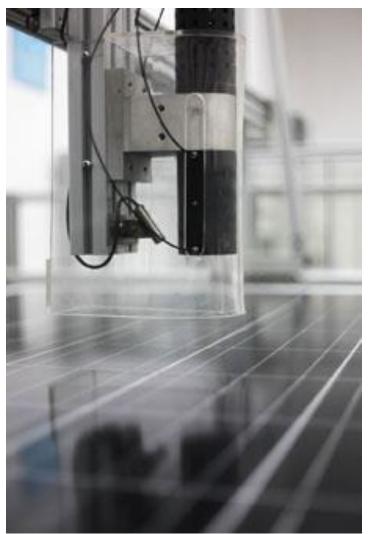


# **World-Class Manufacturing Equipment (2)**







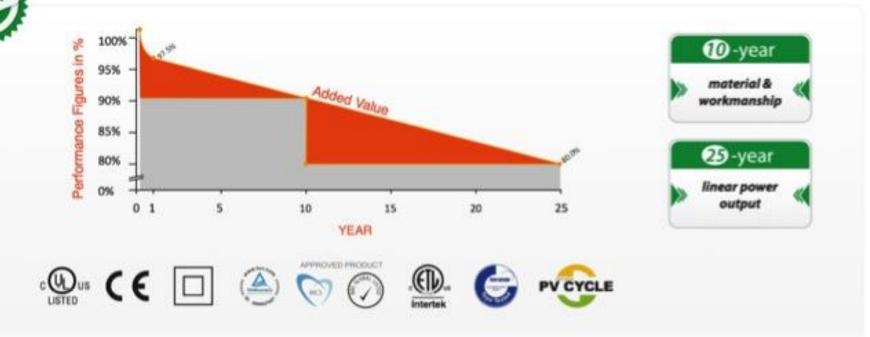




## **Market Leading Warranty**







- √ 10-year product warranty
- √ 25-year linear power warranty
- ✓ Positive power tolerance: 0 to +5W
- ✓ Low 1st year degradation: 2.5% poly, 3.5% mono

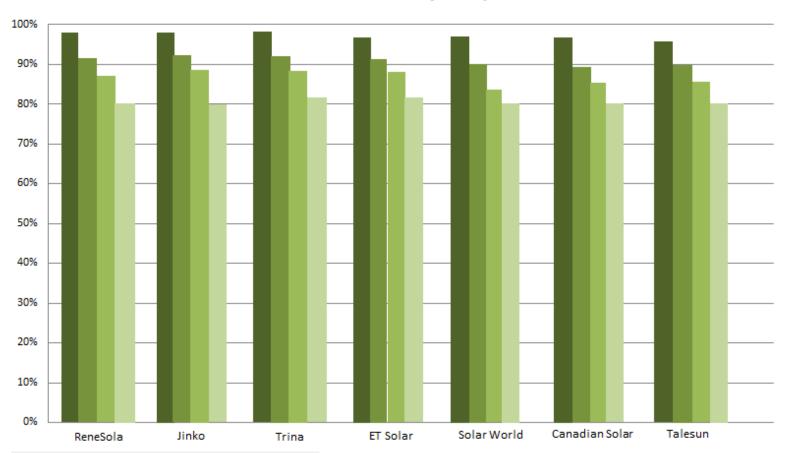


## How Warranties Really Stack Up



Most manufacturer warranties now more or less similar

#### Warranty Comparisons







Partnership with trusted industry service providers



#### **Superior Warranty Backstop**

Product
Warranty

The real difference in the bankability



- ✓ ReneSola-paid 3<sup>rd</sup> party policy
- ✓ Commitment to performance
- ✓ Guaranteed quality
- ✓ De-risk project performance
- ✓ Insurer underwrites bankable modules

"PowerGuard is very proud that our PowerClip warranty solution has become the 'gold standard' for leading solar energy producers like ReneSola around the world. PowerGuard will continue to support the development and success of the global renewable energy industry with unique, industry-leading products and services."

- Mike McMulle, Managing Principal, PowerGuard

Power performance guaranteed globally. Backed by a 3<sup>rd</sup> party.



## **Perfect Solution for All Applications**





#### <u>Light Commercial ></u>

- 80 kW Carport Project
- Arizona



#### < Utility Scale

- 15 MW Multi-array Project
- Ohio



#### < Residential

- 6.24 KW Rooftop Project
- Idaho



## **Global Footprint**









Germany 11.5MW



China 20MW



Italy 9.21MW



Germany 27.6MW



France 368KW



Germany 276.6.KW



# **Global Footprint (2)**





Italy 9.59MW



Germany 2.2 MW



Czech 1.6MW



Bulgaria 4MW



# **Global Footprint (3)**





Slovakia 118.84KW



Greece 1.95 MW



Belgium 1.4MW



Greece 100.8 KW



Bulgaria 12.96KW



Germany 806.4KW



## **Key Value Propositions**



#### **Financial Strength**

- ✓ Superior Financials:
  Listed on NYSE,
  BNEF and Accelios Tier-1,
  AAA SinoSure credit rating.
  ✓ Cost Leader:
- #1 efficiency-adjusted c-Si cost structure in the industry (GTM Research).
  - ✓ Reference Projects:
    Nearly 2 GW modules
    installed world-wide, on
    track for US 300+ MW in
    2013 (1st full-year
    operation).

#### **Superior Product**

- ✓ Technology Leader:#1 out of 170 modules &100 manufacturers (Photon International).
- ✓ R&D Leadership:#1 largest R&D spender in China, #4 in the industryWW (PV Tech).
- ✓ **Disruptive Materials**: #2 largest wafer supplier with upstream efficiency advantage (Spire).

#### **US Market Leadership**

- ✓ Robust Supply Chain:

  Long-term tolling
  agreements for missioncritical access to non-China
  cells for US product
  availability.
- ✓ Operational Excellence: 8 US warehouses with justin-time shipping, 3 US operational centers.
  - ✓ Superior Warranty:
    Market leading warranty
    including 3rd party policy
    (PowerGuard).

"Renesola looks like the stock most likely to give outsized returns in 2013 and 2014."

- Tom Konrad, Contributor, Forbes Magazine



