Investor Presentation
Second Quarter 2016 Update

September 2016
Safe Harbor Statement

This presentation has been prepared by the Company solely to facilitate the understanding of the Company’s business model and growth strategy. The information contained in this presentation has not been independently verified. No representation, warranty or undertaking, express or implied, is made as to, and no reliance should be placed on, the fairness, accuracy, completeness or correctness of the information or the opinions contained herein. None of the Company or any of its affiliates, advisers or representatives will be liable (in negligence or otherwise) for any loss howsoever arising from any use of this presentation or its contents or otherwise arising in connection with the presentation.

This presentation contains forward-looking statements and management may make additional forward-looking statements in response to your questions. Such written and oral disclosures are made pursuant to the Safe Harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. These forward looking statements include descriptions regarding the intent, belief or current expectations of the Company or its officers with respect to its future performance, consolidated results of operations and financial condition. These statements can be identified by the use of words such as “expects,” “plans,” “will,” “estimates,” “projects,” or words of similar meaning. Such forward-looking statements are not guarantees of future performance and involve risks and uncertainties. Actual results may differ materially from expectations implied by these forward-looking statements as a result of various factors and assumptions. Although we believe our expectations expressed in such forward looking statements are reasonable, we cannot assure you that they will be realized, and therefore we refer you to a more detailed discussion of the risks and uncertainties contained in the Company’s annual report on Form 20-F as well as other documents filed with the Securities & Exchange Commission. In addition, these forward looking statements are made as of the current date, and the Company does not undertake to update forward-looking statements to reflect future events or circumstances, unless otherwise required by law.
Renewable Energy Demand Continues to Grow

Investment in renewable energy reached a new record despite falling fossil fuel prices.
Global Annual PV Installation to Break through 60GW in 2016

**Growth Drivers**

- Grid Parity
- Environment Preservation
- Energy Security

Source: Global PV module demand assumptions from Solarbuzz, IHS, Bloomberg New Energy Finance.
We Are at the Very Early Stages of Solar Adoption

Solar energy will grow from ~0.5% of global electricity generation today to >10% by 2030

Global Cumulative Solar PV Installations (GW)

Solar PV Installed Capacity is Forecast to Grow sevenfold to over 1,835 GW in 2030.

Canadian Solar’s key markets such as US, Japan and China are significantly under-penetrated

Source: EPIA, Bloomberg New Energy Finance, Canadian Solar Analysis
Company Overview

- Founded in Ontario, 2001
- Listed on NASDAQ (CSIQ) in 2006
- Over 8,000 employees globally
- Presence in 18 countries / territories
- > 16 GW of solar modules shipped cumulatively
- > 1.8 GWp solar power plants developed, built and connected (incl. Recurrent)
- **Top 2 solar company by MW shipped, revenue and profits in 2015**

### Highlights

- 2015 Revenue: **$3.5 Billion**
- 2015 Shipments: **4.7 GW**
- 2015 Net Income: **$172 Million**
- 2016 Shipment Guidance: **5.4 – 5.5 GW**

### Solar Power Plants Built and Connected

<table>
<thead>
<tr>
<th>Year</th>
<th>2011-12</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-12</td>
<td>80.5</td>
<td>261.8</td>
<td>628.1</td>
<td>1,196.1</td>
</tr>
</tbody>
</table>
Energy Business: Industry Leading Globally Diversified Project Pipeline

20.4 GWp
total project development pipeline

2.4 GWp
total contracted / late-stage project pipeline (1)

~472 MWp
Solar power plants owned and operated resale value of $850 million and profit margin contribution in the mid-teens.

Additional 900 MWp
To be connected in 2016, resale value of $1.25 Billion

Source: Company information as of September 2, 2016
Note: (1) Late-stage project and EPC contract pipeline, nearly all projects have an energy off-take agreement and are expected to be built within the next 2-4 years. Some projects may not reach completion due to failure to secure permits or grid connection, among other risk factors.
(2) Early to mid-stage of development: includes projects under assessment for co-development and acquisition, as well as projects being self-developed where the land has been identified or secured, and an energy off-take agreement is in place or there is a reasonable probability that it can be secured.
Market Leader in the U.S. with 1,129 MWp Project Backlog

Includes Recurrent Energy Across North America

3.4 GWp
Early-stage pipeline

1,129 MWp
Late-stage pipeline

>842 MWp¹
Track record of projects developed and sold in U.S.

Late-stage Pipeline²

<table>
<thead>
<tr>
<th>Project</th>
<th>MWp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tranquility</td>
<td>258</td>
</tr>
<tr>
<td>Astoria 1</td>
<td>131</td>
</tr>
<tr>
<td>Astoria 2</td>
<td>100</td>
</tr>
<tr>
<td>Barren Ridge</td>
<td>78</td>
</tr>
<tr>
<td>Garland</td>
<td>272</td>
</tr>
<tr>
<td>Other</td>
<td>78</td>
</tr>
<tr>
<td>Roserock</td>
<td>212</td>
</tr>
</tbody>
</table>

Commercial Operation by the end of 2016

1. Includes all of Recurrent Energy’s and Canadian Solar (US only) projects developed and delivered; 2. Gross MWp owned by Canadian Solar
Japan Utility-Scale Solar Project Pipeline

Total Solutions business – Japan

576 MWp (1)
pipeline of projects in development

21 MWp
Owned and operated

(1) Some of these projects may not progress to completion

Utility-Scale COD Schedule^2 - MWp

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>MWp</td>
<td>44.0</td>
<td>109.0</td>
<td>156.0</td>
<td>48.0</td>
<td>114.0</td>
<td>42.0</td>
<td>63.0</td>
</tr>
</tbody>
</table>

(2) Expected COD are tentative estimates subject to change, due to delays in securing all the necessary permits among other risk factors.

Projects in construction **112 MWp**

Projects ready-to-build **134.7 MWp**

Projects with signed interconnection agreements **376.2 MWp**
China Utility-scale Solar Project Pipeline

Energy Business – China

2016 Grid Connection Target

<table>
<thead>
<tr>
<th>Province</th>
<th>2016 Late Stage Project Opportunity (MWp)</th>
<th>Feed In Tariff</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jiangsu</td>
<td>31 MW</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RMB 0.98 to 1.0/kWh*</td>
</tr>
<tr>
<td>2</td>
<td>Shanxi</td>
<td>50 MW</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RMB 0.88/kWh</td>
</tr>
<tr>
<td>3</td>
<td>Hebei</td>
<td>20 MW</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RMB 0.88/kWh</td>
</tr>
<tr>
<td>4</td>
<td>Shandong</td>
<td>20 MW</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RMB 0.95 to 0.98/kWh</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>121 MWp</td>
</tr>
</tbody>
</table>

Note: * FIT of RMB 1.0/kWh was assigned to the project that was filed with the provincial government before 2016.

Source: Company information as of August 18, 2016
Module Business: Global Footprint With Diversified Customer Base

> 15.0 GW cumulative modules sold to date

Customers in over 90 countries

with offices in 18 countries

Operational footprint

Sales breakdown by region

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Sales (mn)</th>
<th>Asia Pacific</th>
<th>Europe</th>
<th>Americas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2 2015</td>
<td>$637</td>
<td>$303</td>
<td>$38</td>
<td>$135</td>
</tr>
<tr>
<td></td>
<td>$296</td>
<td>48%</td>
<td>6%</td>
<td>46%</td>
</tr>
<tr>
<td>Q3 2015</td>
<td>$850</td>
<td>$447</td>
<td>$52</td>
<td>$148</td>
</tr>
<tr>
<td></td>
<td>$351</td>
<td>53%</td>
<td>6%</td>
<td>41%</td>
</tr>
<tr>
<td>Q4 2015</td>
<td>$1,120</td>
<td>$581</td>
<td>$73</td>
<td>$278</td>
</tr>
<tr>
<td></td>
<td>$466</td>
<td>42%</td>
<td>6%</td>
<td>53%</td>
</tr>
<tr>
<td>Q1 2016</td>
<td>$721</td>
<td>$311</td>
<td>$90</td>
<td>$1,110</td>
</tr>
<tr>
<td></td>
<td>$320</td>
<td>44%</td>
<td>13%</td>
<td>48%</td>
</tr>
<tr>
<td>Q2 2016</td>
<td>$806</td>
<td>$318</td>
<td>$104</td>
<td>$1,110</td>
</tr>
<tr>
<td></td>
<td>$40%</td>
<td>40%</td>
<td>12%</td>
<td>48%</td>
</tr>
</tbody>
</table>
Capacity Expansion to Optimize Technology and Cost

### Manufacturing Capacity - MW

- **Technology upgrade** – New products, new process, new design
  - Diamond wire saw wafer
  - Black silicon
  - Mono PERC
  - Super 5
- **Global Manufacturing Footprint** – China, Canada, Vietnam, Indonesia, Thailand, Brazil
  - China
  - Thailand
  - Canada
  - Vietnam
  - Brazil
- **Operation efficiency improvements**: Shorter cycle time and lower inventory

### Total Module Shipments - MW

- 2006-16E CAGR: 80.1%

### #2 Solar Energy Solutions Company by Revenue in 2015

- (Revenue in $ ‘millions)

Source: Company information

Source: FactSet Data;
Industry Leading Manufacturing Cost Structure

Q2 2011
- Polysilicon/Wafer: $0.76/W
- Cell: $0.23/W
- Module: $0.33/W
- Total: $1.32/W

Q2 2016
- Polysilicon/Wafer: $0.18/W
- Cell: $0.08/W
- Module: $0.13/W
- Total: $0.39/W

- Lower polysilicon cost
- Lower polysilicon usage leveraging diamond wiresaw
- Reduce raw material usage and purchase cost
- Increase throughput
- Higher efficiency
- Reduce bill of material (BOM) cost

Q4 2017
- Polysilicon/Wafer: $0.11/W
- Cell: $0.06/W
- Module: $0.12/W
- Total: $0.29/W

Q4 2020
- Polysilicon/Wafer: $0.09/W
- Cell: $0.06/W
- Module: $0.10/W
- Total: $0.25/W

Source: Company information
1. Blended manufacturing cost in China
2. Based on internal ingot, wafer, cell and module manufacturing in China
Competitive Pipeline of Homegrown Technologies

**ONYX I – Black Silicon**

- 0.4% cell efficiency and 4 watts module power gain over baseline to over 19% by end of 2016
- Over 3 years in-house R&D, **self-owned IPs**
- Production roll out begun in 2015 Q1
- Ramp up as future multi baseline
- Pleasing aesthetics

**Mono PERC**

- Mono PERC enhances back side passivation and increases cell efficiency to near 21%
- Low Light Induced Degradation (LID), and Potential Induced Degradation (PID) resistant
- Premium product: 60-cell module power to reach 290 Watt
- Production roll out begun in 2016 Q1, will gradually ramp up within the year
Cell Efficiency Roadmap

![Cell Efficiency Graph]

- n-type
- Mono-PERC
- Mono
- ONYX II
- ONYX I
- Multi
## Experienced Board & Senior Management

<table>
<thead>
<tr>
<th>Name / Title</th>
<th>Work Experience</th>
</tr>
</thead>
</table>
| **Dr. Shawn Qu** <br>Chairman, President & CEO (Director) | - Founded Canadian Solar in 2001, and has since then, firmly established the company as a global leader of the solar industry  
- Director & VP at Photowatt International S.A.  
- Research scientist at Ontario Hydro (Ontario Power Generation Corp.) |
| **Dr. Huifeng Chang** <br>SVP, Chief Financial Officer | - Co-Head of Sales & Trading at CICC US in New York  
- CEO of CSOP Asset Management in Hong Kong  
- Vice President of Citigroup Equity Proprietary Investment in New York |
| **Yan Zhuang** <br>SVP and Chief Commercial Officer | - Head of Asia of Hands-on Mobile, Inc.  
- Asia Pacific regional director of marketing planning and consumer insight at Motorola Inc. |
| **Guangchun Zhang** <br>SVP and Chief Operating Officer | - Vice President for R&D and Industrialization of Manufacturing Technology at Suntech Power Holdings  
- Centre for Photovoltaic Engineering at the University of New South Wales and Pacific Solar Pty. Limited. |
| **Arthur Chien** <br>SVP and Chief Strategic Officer | - CEO at Talesun Solar Co., CFO at Canadian Solar Inc.  
- Managing director of Beijing Yinke Investment Consulting Co. Ltd.  
- Chief financial officer of China Grand Enterprises Inc. |
| **Robert McDermott** <br>Chairperson of the Corporate Governance, Nominating and Compensation Committees | - Partner with McMillan LLP, a business and commercial law firm  
- Director and senior officer of Boliden Ltd. |
| **Lars-Eric Johansson** <br>Chair of the Audit and member of Governance, and Compensation Committees | - CEO of Ivanhoe Nickel & Platinum Ltd.  
- Chairperson of the Audit Committee of Harry Winston Diamond |
| **Dr. Harry E. Ruda** <br>Chair of Technology and member of the Audit, Governance, Compensation Committees | - Director of the Centre for Advanced Nanotechnology, Stanley Meek Chair in Nanotechnology and Prof. of Applied Science and Engineering at the University of Toronto, Canada |
| **Andrew Wong** <br>Member of the Audit, Corporate Governance, Compensation Committees | - Senior Advisor to Board of Directors of Henderson Land Development Co.  
- Director of Ace Life Insurance Co. Ltd., China CITIC Bank Corp., Intime Retail (Group) Co. Ltd. And Shenzen Yantian Port (Group) Co. Ltd. |

Source: Company information
# Income Statement Summary

## Revenue – US$ million

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>Q2 15</th>
<th>Q3 15</th>
<th>Q4 15</th>
<th>Q1 16</th>
<th>Q2 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>2,961</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>3,468</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Gross Profit – US$ million

- **2014**: 581
- **2015**: 577

## Operating Income – US$ million

12.4%  7.1%  5.1%  3.6%  9.4%  5.3%  4.9%

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>Q2 15</th>
<th>Q3 15</th>
<th>Q4 15</th>
<th>Q1 16</th>
<th>Q2 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>366</td>
<td></td>
<td>32</td>
<td>31</td>
<td>105</td>
<td>38</td>
<td>40</td>
</tr>
<tr>
<td>2015</td>
<td>247</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Net Income – US$ million

8.1%  5.0%  2.8%  3.6%  5.6%  3.1%  5.0%

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>Q2 15</th>
<th>Q3 15</th>
<th>Q4 15</th>
<th>Q1 16</th>
<th>Q2 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>240</td>
<td></td>
<td>18</td>
<td>30</td>
<td>62</td>
<td>23</td>
<td>40</td>
</tr>
<tr>
<td>2015</td>
<td>172</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Canadian Solar**

Make The Difference
Operating Expenses as % of Net Revenue

Selling expenses

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>Q2 15</th>
<th>Q3 15</th>
<th>Q4 15</th>
<th>Q1 16</th>
<th>Q2 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>4.3%</td>
<td>4.3%</td>
<td>4.4%</td>
<td>5.1%</td>
<td>3.5%</td>
<td>4.8%</td>
<td>4.2%</td>
</tr>
</tbody>
</table>

General & administrative expenses

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>Q2 15</th>
<th>Q3 15</th>
<th>Q4 15</th>
<th>Q1 16</th>
<th>Q2 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>2.6%</td>
<td></td>
<td>4.7%</td>
<td>4.3%</td>
<td>6.4%</td>
<td>4.6%</td>
<td>7.4%</td>
</tr>
</tbody>
</table>

Research & development expenses

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>Q2 15</th>
<th>Q3 15</th>
<th>Q4 15</th>
<th>Q1 16</th>
<th>Q2 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>0.4%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.7%</td>
<td>0.4%</td>
<td>0.6%</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

Total operating expenses

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>Q2 15</th>
<th>Q3 15</th>
<th>Q4 15</th>
<th>Q1 16</th>
<th>Q2 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>7.3%</td>
<td>9.5%</td>
<td>10.0%</td>
<td>11.3%</td>
<td>8.5%</td>
<td>10.3%</td>
<td>12.3%</td>
</tr>
</tbody>
</table>

Source: Company filings
Note: Percentages are of the total net revenue in the corresponding period.
## Selected Balance Sheet & Cash Flow Items

### Cash & cash equivalents – US$ million

<table>
<thead>
<tr>
<th>Year/Quarter</th>
<th>2014</th>
<th>2015</th>
<th>Q2'15</th>
<th>Q3'15</th>
<th>Q4'15</th>
<th>Q1'16</th>
<th>Q2'16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>1,025</td>
<td>1,135</td>
<td>1,044</td>
<td>1,002</td>
<td>1,135</td>
<td>999</td>
<td>1,007</td>
</tr>
<tr>
<td>Restricted</td>
<td>475</td>
<td>582</td>
<td>641</td>
<td>656</td>
<td>582</td>
<td>587</td>
<td>512</td>
</tr>
<tr>
<td>Cash</td>
<td>550</td>
<td>553</td>
<td>403</td>
<td>346</td>
<td>553</td>
<td>412</td>
<td>495</td>
</tr>
</tbody>
</table>

### Cash flow from operations – US$ million

<table>
<thead>
<tr>
<th>Year/Quarter</th>
<th>2014</th>
<th>2015</th>
<th>Q2'15</th>
<th>Q3'15</th>
<th>Q4'15</th>
<th>Q1'16</th>
<th>Q2'16</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>265</td>
<td>413</td>
<td>29</td>
<td>41</td>
<td>218</td>
<td>145</td>
<td>-108</td>
</tr>
</tbody>
</table>

### Total debt – US$ million

<table>
<thead>
<tr>
<th>Year/Quarter</th>
<th>2014</th>
<th>2015</th>
<th>Q2'15</th>
<th>Q3'15</th>
<th>Q4'15</th>
<th>Q1'16</th>
<th>Q2'16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Term</td>
<td>1,010</td>
<td>775</td>
<td>1,443</td>
<td>1,724</td>
<td>1,940</td>
<td>2,331</td>
<td>2,422</td>
</tr>
<tr>
<td>Long Term</td>
<td>285</td>
<td>1,165</td>
<td>940</td>
<td>1,060</td>
<td>1,165</td>
<td>1,359</td>
<td>1,387</td>
</tr>
</tbody>
</table>

### Depreciation & amortization – US$ million

<table>
<thead>
<tr>
<th>Year/Quarter</th>
<th>2014</th>
<th>2015</th>
<th>Q2'15</th>
<th>Q3'15</th>
<th>Q4'15</th>
<th>Q1'16</th>
<th>Q2'16</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>83</td>
<td>94</td>
<td>22</td>
<td>25</td>
<td>25</td>
<td>26</td>
<td>26</td>
</tr>
</tbody>
</table>

Source: Company filings
Note: (1) Working capital calculated as total current assets less total current liabilities
(2) Including US$150 million in aggregate principal amount of 4.25% convertible senior notes due 2019. The amount of the convertible senior notes as of Q2 2016 is US$128 million.
### Guidance as of August 18, 2016

<table>
<thead>
<tr>
<th></th>
<th>Q2 2016</th>
<th>Q3 2016</th>
<th>FY2015</th>
<th>FY2016</th>
<th>YoY Δ%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Module shipments</strong></td>
<td>1,290 MW</td>
<td>1,200 MW – 1,300 MW</td>
<td>4.7GW</td>
<td>5.4 GW – 5.5 GW</td>
<td>+14.9%</td>
</tr>
<tr>
<td><strong>Revenue</strong></td>
<td>$ 806 m</td>
<td>$ 660 m to $ 710 m</td>
<td>$3.47 bn</td>
<td>$3.0 bn to $3.2 bn</td>
<td>-10.7%</td>
</tr>
<tr>
<td><strong>Gross margin</strong></td>
<td>17.2%</td>
<td>14% – 16%(1)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

1-Includes module business and project business

---

**Canadian Solar may consider selling some of its OECD projects, in which case revenue for the full year 2016 could exceed the range of $3.0 billion to $3.2 billion.**
THANK YOU!

September 2016