Investor Presentation
Second Quarter 2017 Update
Safe Harbor Statement

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“Global investment in renewables (excluding large hydro) fell 17% to $287 billion in 2016, though installations rose 9% to 160GW, underscoring the “more-for-less” benefit of falling cost/watt.”
-- J.P. Morgan Analyst Research Report
2016 Global Annual PV Installation Exceeded 81GW

CAGR: 37.1%

Growth Drivers
✓ Grid Parity
✓ Environment Preservation
✓ Energy Security

Source: Global PV module demand assumptions from IHS, analyst research reports
We Are at the Very Early Stages of Solar Adoption

Solar energy will grow from ~1% of global electricity generation today to >10% by 2030

Global Cumulative Solar PV Installations (GW)

- GW Installed
- % of Electricity Generated

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

- Solar PV Installations by Country (GW)
- Solar Electricity Contribution (%)

Source: EPIA, IHS, EIA, Canadian Solar Analysis; Cumulative Installations as of the year 2016.

Solar PV installed capacity is forecast to grow to over 1,835 GW in 2030.
Company Overview

- Founded in Ontario, 2001
- Listed on NASDAQ (CSIQ) in 2006
- Over 9,700 employees globally
- Presence in 18 countries / territories
- > 22 GW of solar modules shipped cumulatively
- > 3.2 GWp solar power plants built and connected (incl. Recurrent)
- No. 1 Solar Company 2016 according to IHS

Highlights

- Q2 2017 Revenue: **$692 million**
- Q2 2017 Shipment: **1.75 GW**
- Q3 2017 Shipment Guidance: **1.65 GW to 1.70 GW**
- 2017 Shipment Guidance: **6.0 GW – 6.5 GW**

Source: Company information as of August 14, 2017.
Energy Business: Globally Diversified Project Pipeline

9.5 GWp
Total project development pipeline

8.1 GWp
Early to mid-stage development pipeline (2)

~1.4 GWp
Total contracted / late-stage project pipeline (1)

~1,260 MWp
Solar power plants owned and operated, with an estimated total resale value of approximately $1.8 billion

Priority Markets for Utility-scale Project Development

Short term
Mid term
Long term
Monitoring

Source: Company information as of August 14, 2017
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 only those projects that have been approved by our internal Investment Committee or projects that are expected to be brought to the Investment Committee in the near term.
## Project Summary

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Plants In Operation at 06/30/2017</th>
<th>Plants In Operation at 07/31/2017</th>
<th>Q3'17 (Gross MWp)</th>
<th>Q4'17</th>
<th>2018 and After</th>
<th>Total Late-stage Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>808</td>
<td>808</td>
<td>92</td>
<td>-</td>
<td>28</td>
<td>120</td>
</tr>
<tr>
<td>China</td>
<td>186.7</td>
<td>186.7</td>
<td>-</td>
<td>10</td>
<td>200</td>
<td>210</td>
</tr>
<tr>
<td>UK</td>
<td>150</td>
<td>150</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Japan</td>
<td>110.5</td>
<td>110.5</td>
<td>30</td>
<td>21.4</td>
<td>311</td>
<td>362.4</td>
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<tr>
<td>Spain</td>
<td>5</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Brazil</td>
<td>-</td>
<td>-</td>
<td>191.5</td>
<td>92.5</td>
<td>115</td>
<td>399</td>
</tr>
<tr>
<td>Mexico</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>68</td>
<td>68</td>
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<tr>
<td>India</td>
<td>-</td>
<td>36</td>
<td>-</td>
<td>108</td>
<td>-</td>
<td>108</td>
</tr>
<tr>
<td>Australia</td>
<td>-</td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>113</td>
<td>118</td>
</tr>
<tr>
<td>Africa</td>
<td>-</td>
<td>-</td>
<td>6</td>
<td>-</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Gross MWp</strong></td>
<td><strong>1,260.2</strong></td>
<td><strong>1,296.2</strong></td>
<td><strong>324.5</strong></td>
<td><strong>231.9</strong></td>
<td><strong>835</strong></td>
<td><strong>1,391.4</strong></td>
</tr>
</tbody>
</table>

Source: Company information as of August 14, 2017
Market Leader in the U.S.

Including Recurrent Energy across North America

3.3 GWp
Early to mid-stage pipeline

120 MWp
Late-stage pipeline

808 MWp
Owned and operated

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

Total Solutions Business – Japan

362 MWp
Late-stage pipeline

110.5 MWp
Owned and operated

Utility-scale COD Schedule1 - MWp

Note: (1) Expected COD are tentative estimates subject to change, due to delays in securing all the necessary permits among other risk factors.

- 362 MWp of projects have secured the interconnection agreements, including 159 MWp in construction and 203 MWp under development
- Projects in the bidding process 210 MWp
China Utility-scale Solar Project Pipeline

Energy Business – China

China Utility-scale Solar Project Pipeline

Source: Company information as of August 14, 2017
## Brazil Utility-scale Solar Project Pipeline

<table>
<thead>
<tr>
<th>Project</th>
<th>Gross MWp</th>
<th>Status</th>
<th>Expected COD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pirapora I (1)</td>
<td>191.5</td>
<td>Construction</td>
<td>2017</td>
</tr>
<tr>
<td>Pirapora II (1)</td>
<td>115</td>
<td>Development</td>
<td>2018</td>
</tr>
<tr>
<td>Pirapora III (2)</td>
<td>92.5</td>
<td>Construction</td>
<td>2017</td>
</tr>
<tr>
<td>Total</td>
<td>399</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Canadian Solar has completed the sale of an 80% interest in each of the Pirapora projects to EDF EN and supplies modules for all these projects.

Source: Company information as of August 14, 2017
Module Business: Global Footprint With Diversified Customer Base

> 22 GW
Cumulative modules sold to date

Customers in over 100 countries
With offices in 18 countries

Sales Breakdown by Region

Q2 2016
$318 mn (39%)
$104 mn (13%)
$384 mn (48%)

Q3 2016
$281 mn (43%)
$106 mn (16%)
$270 mn (41%)

Q4 2016
$111 mn (16%)
$83 mn (12%)
$138 mn (21%)

Q1 2017
$419 mn (63%)
$83 mn (13%)
$200 mn (30%)

Q2 2017
$453 mn (65%)
$90 mn (13%)
$150 mn (22%)

$ 806 mn
$ 657 mn
$ 668 mn
$ 677 mn
$ 692 mn

Operational Footprint

Sales office
Manufacturing facility

Asia Pacific
Europe and Others
Americas
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
  - Black silicon + PERC

- **Global Manufacturing Footprint**
  - Brazil
  - Canada
  - China
  - Indonesia
  - South East Asia
  - Vietnam

- **Operation efficiency improvements: Shorter cycle time and lower inventory**

Total Module Shipments - MW

Top 4 Solar Energy Solutions Company by Revenue in 2016

Source: Company information
Note: (1) based on IHS estimate
Competitive Pipeline of Homegrown Technologies

Poly Gen3

- 0.4% cell efficiency and 4 watts module power gain over baseline; cell efficiency to reach over 19% in mass production
- Over 4 years in-house R&D, self-owned IPs
- 100% in-house multi cell production (~4GW) using this technology by the end of 2017
- Pleasing aesthetics

Mono PERC

- Mono PERC enhances back side passivation and increases cell efficiency to 21%
- Low Light Induced Degradation (LID), and Potential Induced Degradation (PID) resistant
- Premium product: 60-cell module power to reach over 300 Watt
- 100% mono cell production to be upgraded to mono PERC by the end of 2017
Cell Efficiency Roadmap

Cell Efficiency

<table>
<thead>
<tr>
<th>Year</th>
<th>Mono PERC</th>
<th>Poly Gen4</th>
<th>Poly Gen3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>18.50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td>19%</td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td></td>
<td>21%</td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
<td>22%</td>
</tr>
</tbody>
</table>

Highlights

- Gen3 nano-texturing technology paves the way for using diamond-wire saw wafer in multi-crystalline cell production
- Gen4 will improve the multi-crystalline cell efficiency to above 21.4% by 2020
- Mono PERC cell efficiency can reach above 22.5% in mass production by 2020
- PERC technology is expected to fully replace Al BSF by the end of 2018

Source: Company information as of August 14, 2017
# Experienced Board & Senior Management

<table>
<thead>
<tr>
<th>Name / Title</th>
<th>Work Experience</th>
</tr>
</thead>
</table>
| **Dr. Shawn Qu**  
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. Hui Feng Chang**  
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**  
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**  
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**  
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. |
| **Jianyi Zhang**  
SVP and Chief Compliance Officer | - Senior advisor to several Chinese law firms  
- Senior assistant general counsel at Walmart Stores, Inc.  
- Managing Partner at Troutman Sanders LLP |
| **Robert McDermott**  
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**  
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**  
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**  
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>Year</th>
<th>Q2 16</th>
<th>Q3 16</th>
<th>Q4 16</th>
<th>Q1 17</th>
<th>Q2 17</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>3,468</td>
<td>2,853</td>
<td>806</td>
<td>657</td>
<td>668</td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
<td>677</td>
<td>692</td>
<td></td>
</tr>
</tbody>
</table>

**Gross Profit – US$ million**

<table>
<thead>
<tr>
<th>Year</th>
<th>Q2 16</th>
<th>Q3 16</th>
<th>Q4 16</th>
<th>Q1 17</th>
<th>Q2 17</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>168</td>
<td></td>
<td>117</td>
<td>93</td>
<td>(1)</td>
</tr>
<tr>
<td>2016</td>
<td>461.3</td>
<td></td>
<td>139</td>
<td>117</td>
<td>91</td>
</tr>
</tbody>
</table>

**Operating Income – US$ million**

<table>
<thead>
<tr>
<th>Year</th>
<th>Q2 16</th>
<th>Q3 16</th>
<th>Q4 16</th>
<th>Q1 17</th>
<th>Q2 17</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>247</td>
<td></td>
<td>137</td>
<td>(1)</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
<td>40</td>
<td>27</td>
<td>32</td>
</tr>
</tbody>
</table>

**Net Income – US$ million**

<table>
<thead>
<tr>
<th>Year</th>
<th>Q2 16</th>
<th>Q3 16</th>
<th>Q4 16</th>
<th>Q1 17</th>
<th>Q2 17</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>172</td>
<td></td>
<td>40</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>38</td>
</tr>
</tbody>
</table>

Source: Company filings

Note: (1) Non-GAAP adjusted numbers, excluding the AD/CVD true-up provision of $44.1 million
(2) Non-GAAP adjusted numbers, adjusted to exclude a one-time provision of $8.6 million and net of income tax effect
Operating Expenses as % of Net Revenue

**Selling Expenses**

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>Q2 16</th>
<th>Q3 16</th>
<th>Q4 16</th>
<th>Q1 17</th>
<th>Q2 17</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>4.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2016</td>
<td>5.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2 16</td>
<td>4.2%</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3 16</td>
<td>5.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q4 16</td>
<td>6.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1 17</td>
<td>5.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2 17</td>
<td>5.7%</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

**Research & Development Expenses**

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>Q2 16</th>
<th>Q3 16</th>
<th>Q4 16</th>
<th>Q1 17</th>
<th>Q2 17</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>0.5%</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>0.6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2 16</td>
<td>0.6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3 16</td>
<td>0.7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q4 16</td>
<td>0.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1 17</td>
<td>0.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2 17</td>
<td>1.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**General & Administrative Expenses**

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>Q2 16</th>
<th>Q3 16</th>
<th>Q4 16</th>
<th>Q1 17</th>
<th>Q2 17</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>4.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>7.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2 16</td>
<td>7.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3 16</td>
<td>8.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q4 16</td>
<td>9.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1 17</td>
<td>6.9% (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2 17</td>
<td>7.6%</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Total Operating Expenses**

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>Q2 16</th>
<th>Q3 16</th>
<th>Q4 16</th>
<th>Q1 17</th>
<th>Q2 17</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>9.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>11.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2 16</td>
<td>12.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Q3 16</td>
<td>13.7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q4 16</td>
<td>9.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1 17</td>
<td>12.6% (2)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2 17</td>
<td>12.1%</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>

Source: Company filings
Note: Percentages are of the total net revenue in the corresponding period.
(2) Non-GAAP adjusted numbers, adjusted to exclude a one-time provision of $8.6 million
## Guidance as of August 14, 2017

<table>
<thead>
<tr>
<th></th>
<th>Q2 2017</th>
<th>Q3 2017</th>
<th>FY2016</th>
<th>FY2017</th>
<th>YoY Δ%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module Shipments</td>
<td>1,745 MW</td>
<td>1,650 MW to 1,700 MW</td>
<td>5,232 MW</td>
<td>6.0 GW to 6.5 GW</td>
<td>+24.2%</td>
</tr>
<tr>
<td>Revenue</td>
<td>$692 mn</td>
<td>$805 mn to $825 mn</td>
<td>$2.85 bn</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Gross Margin</td>
<td>24.2%&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>15% to 17%&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

1-Includes module business and project business
THANK YOU!

August 2017