



# Investor Presentation

Third Quarter 2017 Update

November 2017

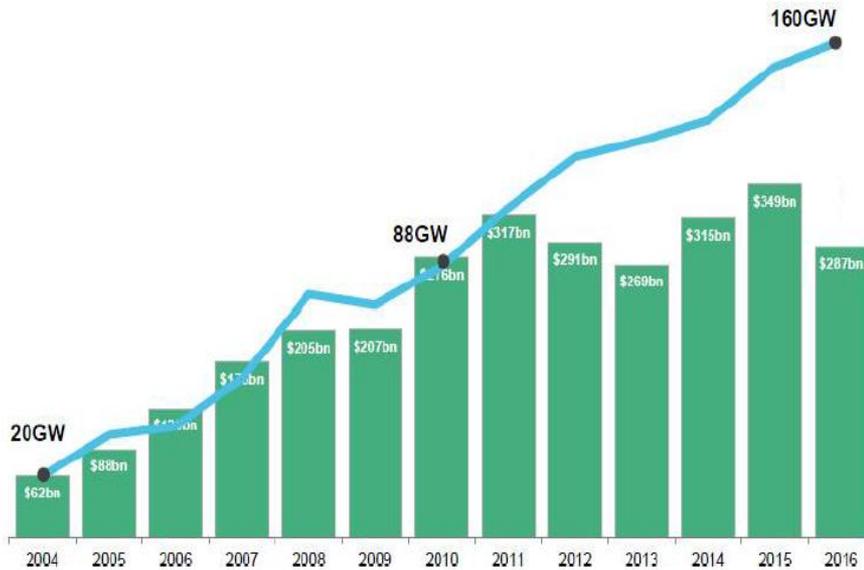
CSIQ NASDAQ Listed

# 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.

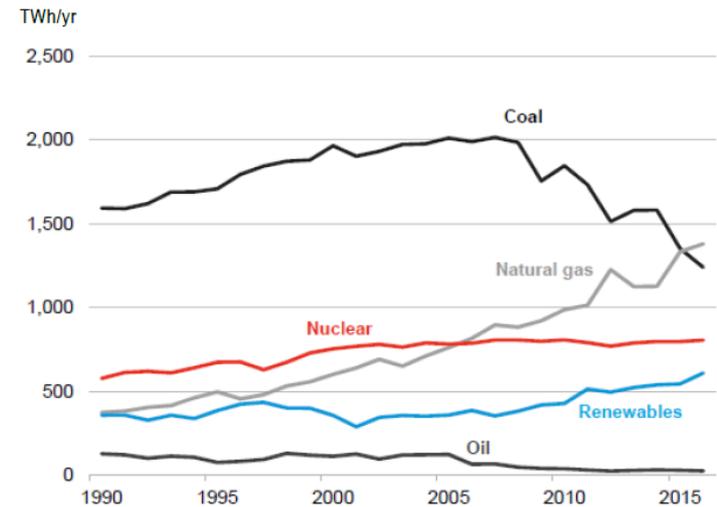
# Global Renewable Energy Installation Is Increasing

## More Wind and Solar Globally for Less Dollars in 2016



Source: BNEF

## US Power Generation by Source

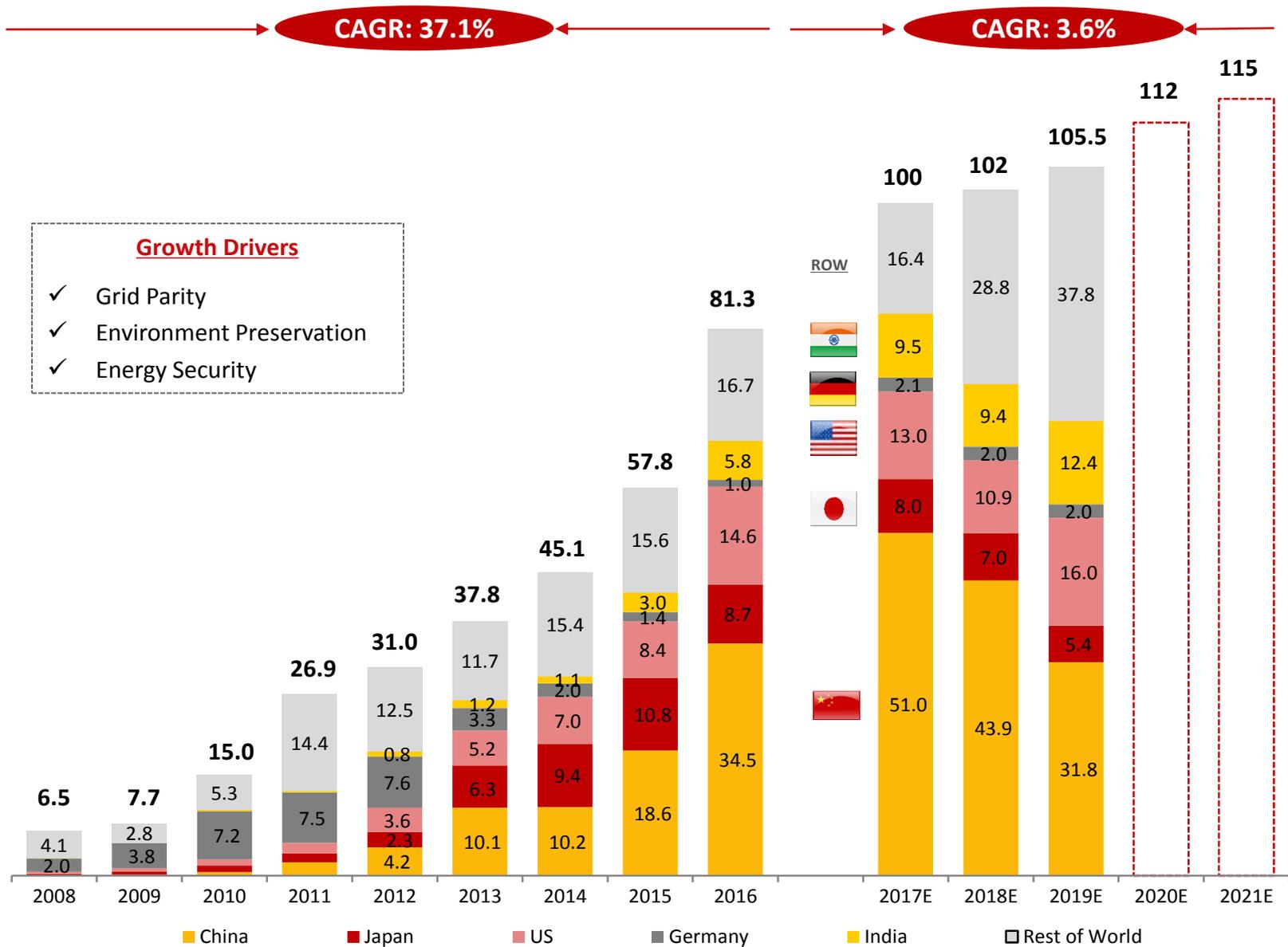


Source: BNEF

“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

# 2017 Global Annual PV Installation Expected to Reach 100 GW

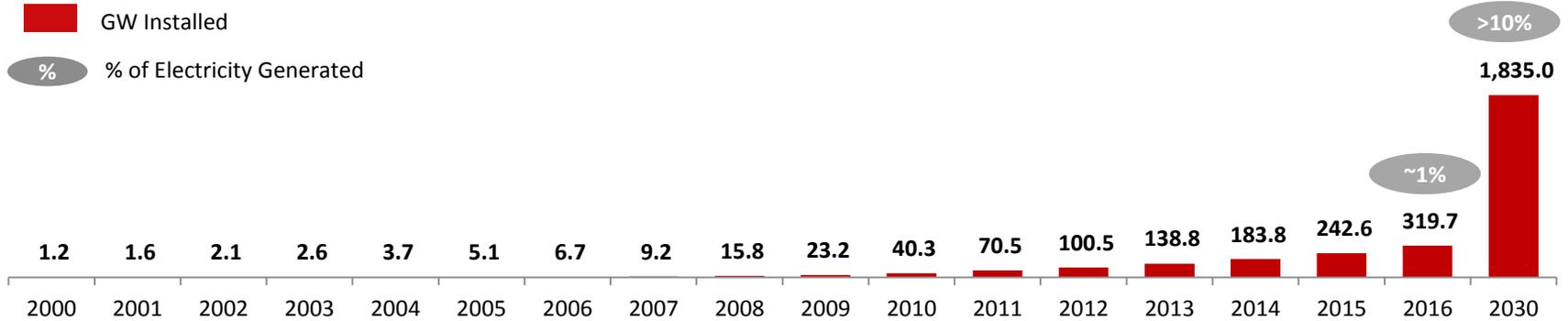


Source: Global PV module demand assumptions from IHS, analyst research reports

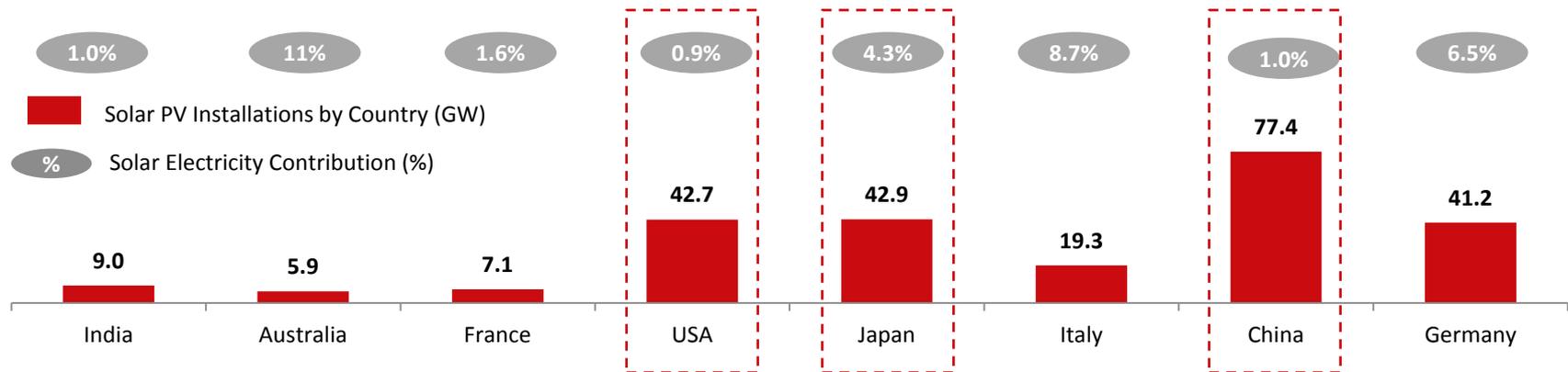
# We Are at the Very Early Stages of Solar Adoption

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

## Global Cumulative Solar PV Installations (GW)



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



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

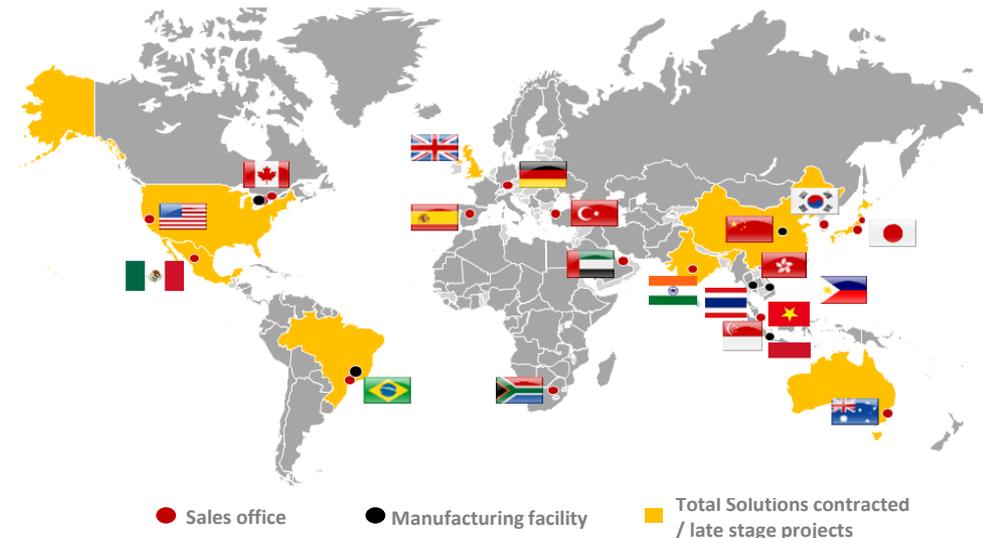
- 🌿 Founded in Ontario, 2001
- 🌿 Listed on NASDAQ (CSIQ) in 2006
- 🌿 Over 11,000 employees globally
- 🌿 Presence in 18 countries / territories
- 🌿 > 24 GW of solar modules shipped cumulatively
- 🌿 > 3.2 GWp solar power plants built and connected (incl. Recurrent)
- 🌿 No. 1 Solar Company 2016 according to IHS

## Highlights

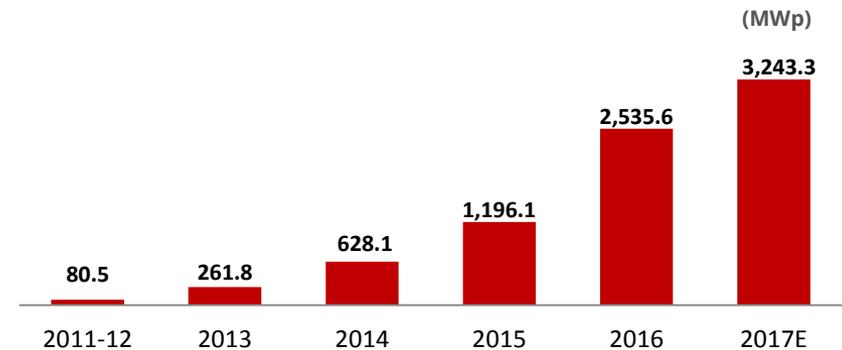
- 🌿 Q3 2017 Revenue: **\$912.2 million**
- 🌿 Q3 2017 Shipment: **1.87 GW**
- 🌿 Q4 2017 Shipment Guidance: **1.65 GW to 1.75 GW**
- 🌿 Q4 2017 Revenue Guidance: **\$1.77 billion to \$1.81 billion**
- 🌿 2017 Shipment Guidance: **6.7 GW – 6.8 GW**
- 🌿 2017 Revenue Guidance: **\$4.05 billion to \$4.09 billion**

Source: Company information as of November 9, 2017.

## Global Footprint and Brand



## Solar Power Plants Built and Connected



# Energy Business: Globally Diversified Project Pipeline

## Priority Markets for Utility-scale Project Development

**12 GWp**

Total project development pipeline

**10.4 GWp**

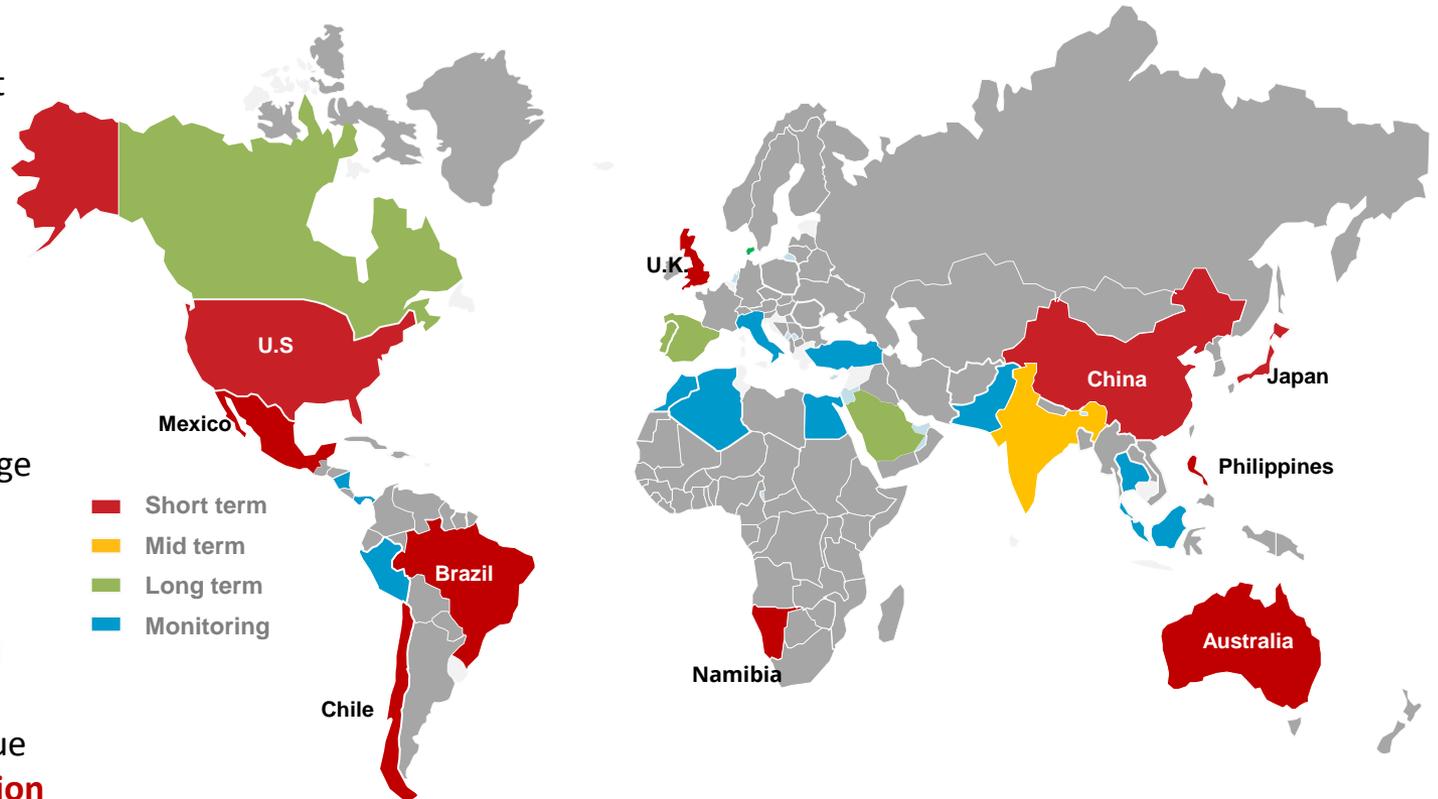
Early to mid-stage development pipeline <sup>(2)</sup>

**~1.6 GWp**

Total contracted / late-stage project pipeline <sup>(1)</sup>

**~1,420 MWp**

Solar power plants owned and operated, with an estimated total resale value of approximately **\$2.0 billion**



Late-stage, utility-scale solar project pipeline (MWp)									
<u>China</u>	<u>Japan</u>	<u>Brazil</u>	<u>U.S.</u>	<u>Australia</u>	<u>Mexico</u>	<u>Chile</u>	<u>Philippines</u>	<u>Africa</u>	<u>U.K.</u>
416	344.5	326.4	238	117	68	41	22	18	8

Source: Company information as of November 9, 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

Country/Region	Plants In Operation at 09/30/2017	Late-stage Projects Expected COD Schedule		
		Q4'17	2018 and After	Total Late-stage Projects
(Gross MWp)				
US	900	-	238	238
China	188.7	16	400	416
UK	150	-	8	8
Japan	139.8	19.1	325.4	344.5
Spain	5	-	-	-
Brazil	-	130.8	195.6	326.4
Mexico	-	-	68	68
India	36	-	-	-
Australia	-	-	117	117
Chile	-	-	41	41
Philippines	-	-	22	22
Africa	-	6	12	18
<b>Total Gross MWp</b>	<b>1,419.5</b>	<b>171.9</b>	<b>1,427</b>	<b>1,598.9</b>

Source: Company information as of November 9, 2017

# Market Leader in the U.S.



## U.S. Project Development Business Footprint

Including Recurrent Energy across North America

**5.2 GWp**

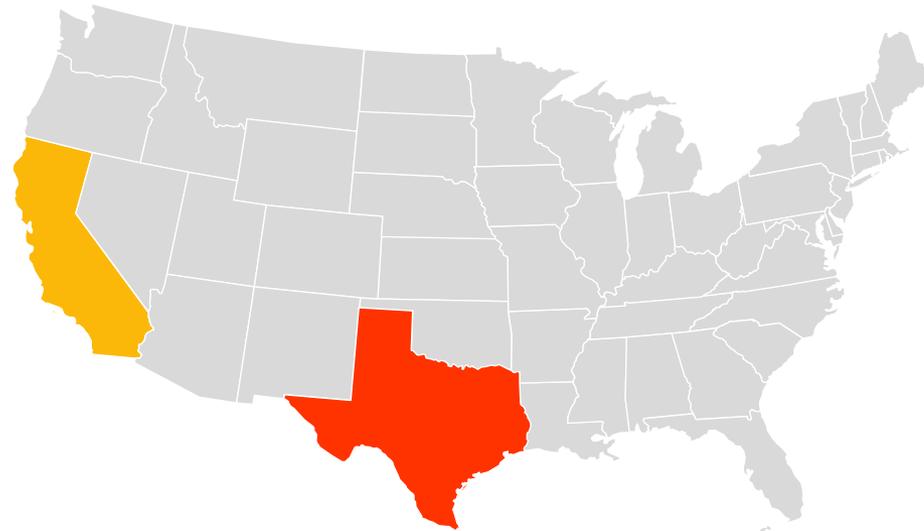
Early to mid-stage pipeline

**238 MWp**

Late-stage pipeline<sup>1</sup>

**900 MWp**

Owned and operated<sup>2</sup>



### Late-stage Pipeline<sup>1</sup>

RoseRock



*Commercial Operation since Q4 2016*

Gaskell West 1



*Under Development,  
Commercial Operation by 2018*

Mustang 2

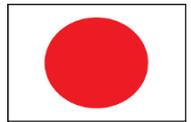


*Under Development  
Commercial Operation by 2019*

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

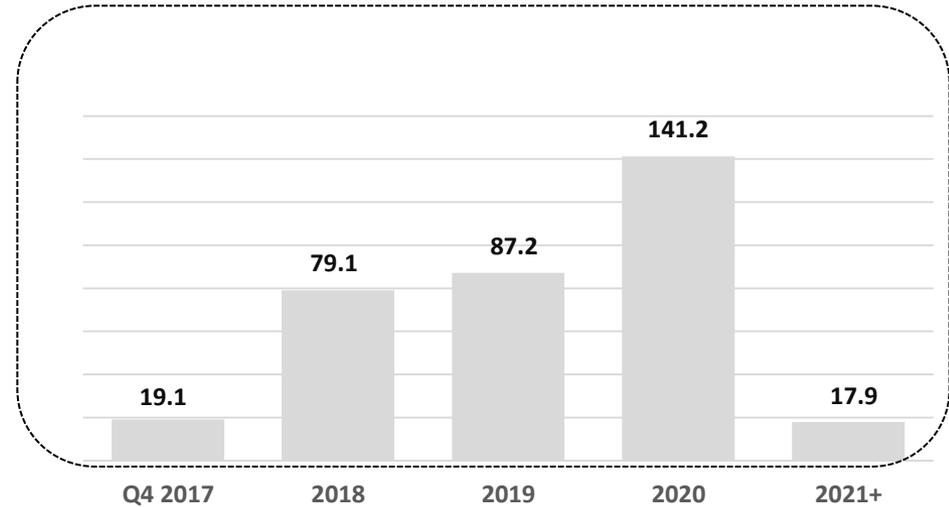
**344.5 MW<sub>p</sub>**  
Late-stage pipeline

**68.1 MW<sub>p</sub><sup>(1)</sup>**  
Owned and operated



Yamaguchi plant: 24 MWp

## Utility-scale COD Schedule<sup>1</sup> - MWp



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

- **344.5 MWp** of projects have secured the interconnection agreements and FIT, including **140.6 MWp** in construction and **203.9 MWp** under development
- Projects in the bidding process **198.8 MWp**

Source: Company information as of November 9, 2017

Note: (1) Plants in operation after the sale of 72.7 MWp of operating plants to Canadian Solar Infrastructure Fund, Inc. in October 2017.

# China Utility-scale Solar Project Pipeline



## Energy Business – China



Province	Late-stage Project Opportunity (MW <sub>p</sub> )	Feed-in Tariff (RMB/kWh)
1 Jiangsu	10	0.85
2 Shandong	15	0.85
3 Hebei	16	0.75
4 Shanxi	40	0.75
5 Henan	100	0.85
6 Jilin	15	0.75
7 Inner Mongolia	220 <sup>(1)</sup>	0.50 to 0.65
<b>Total</b>	<b>416</b>	

Note: (1) including Two Top Runner Projects, 100 MWp each in size.

Source: Company information as of November 9, 2017

# Brazil Utility-scale Solar Project Pipeline



## Late-stage Pipeline

Project	Gross MWp	Status	Expected COD
Guimarania <sup>(1)</sup>	80.6	Development	2018
Pirapora I <sup>(1)</sup>	38.3*	Commissioned	2017
Pirapora II <sup>(1)</sup>	115	Construction	2018
Pirapora III <sup>(2)</sup>	92.5	Construction	2017
Total	<u>326.4</u>		



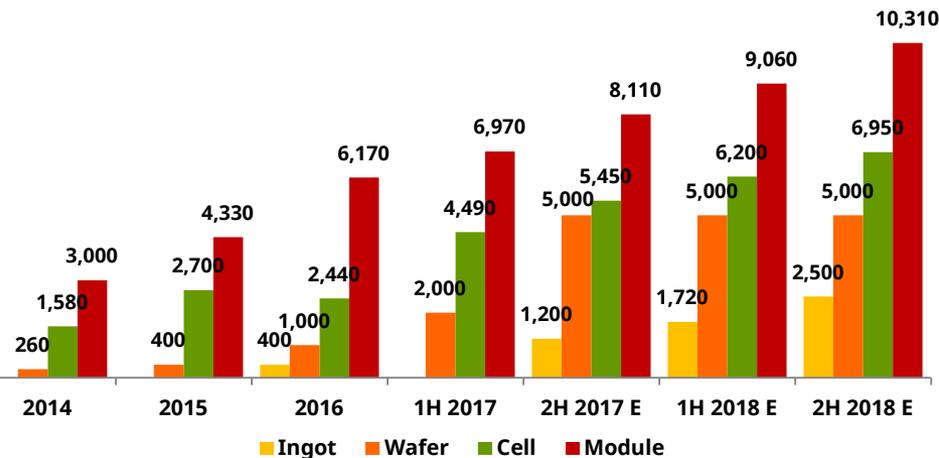
**Canadian Solar has completed the sale of an 80% interest in each of the Pirapora projects to EDF EN and supplies modules for all these projects.**

Source: Company information as of November 9, 2017

\*38.3 MWp represents the Company's 20% equity interest in 191.5 MWp Pirapora I project.

# Capacity Expansion to Optimize Technology and Cost

## Manufacturing Capacity - MW



### Technology upgrade - New products, new process, new design

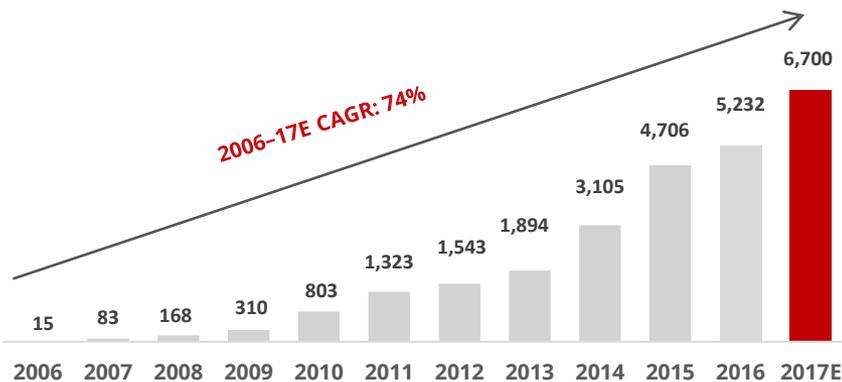
- ✓ Diamond wire-saw wafer
- ✓ Black silicon
- ✓ Mono PERC
- ✓ Black silicon + PERC

### Global Manufacturing Footprint

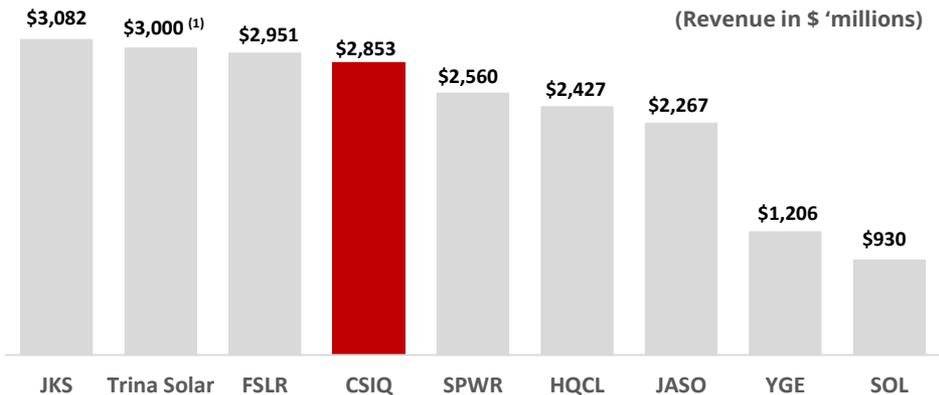
- ✓ Brazil
- ✓ Canada
- ✓ China
- ✓ Indonesia
- ✓ South East Asia
- ✓ Vietnam

### 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

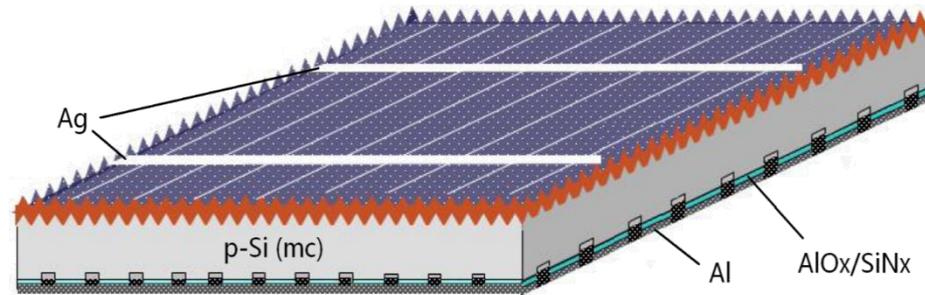
# Competitive Pipeline of Homegrown Technologies

## 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

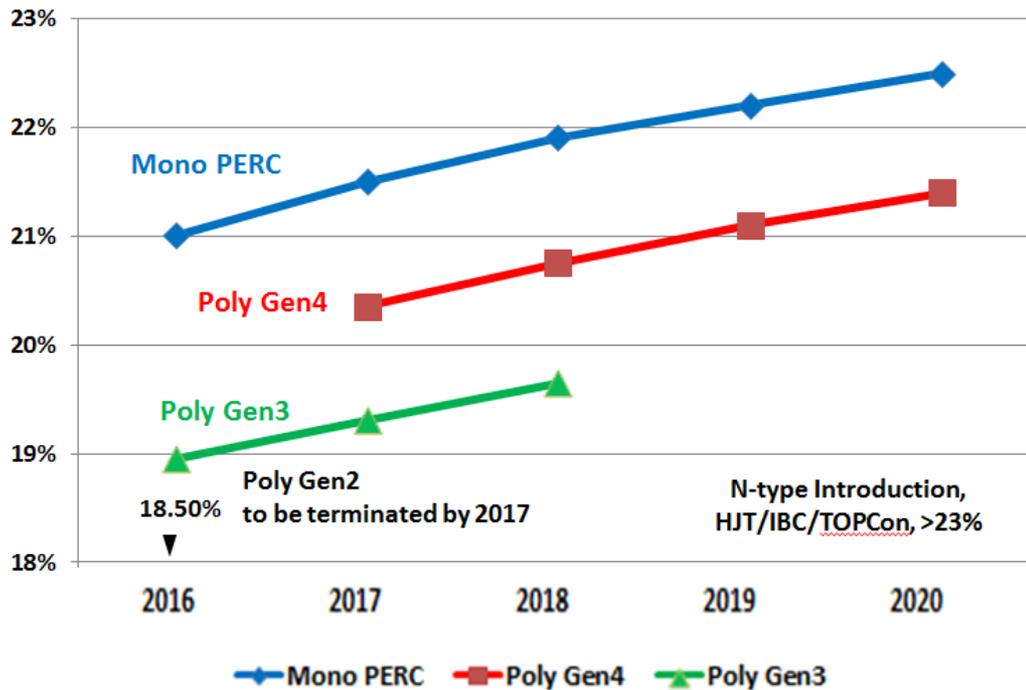
## Mono PERC



- ☀️ 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



## 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 November 9, 2017

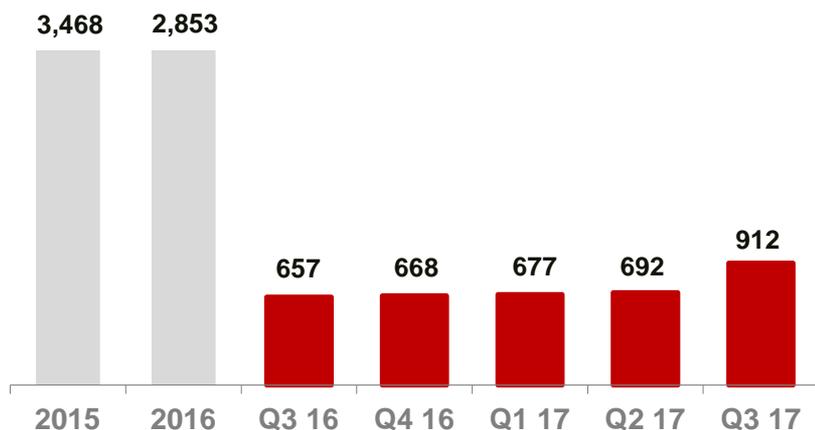
# Experienced Board & Senior Management

Name / Title	Work Experience	
 <p><b>Dr. Shawn Qu</b> <i>Chairman, President &amp; CEO (Director)</i></p>	<ul style="list-style-type: none"> <li>■ Founded Canadian Solar in 2001, and has since then, firmly established the company as a global leader of the solar industry</li> <li>■ Director &amp; VP at Photowatt International S.A.</li> <li>■ Research scientist at Ontario Hydro (Ontario Power Generation Corp.)</li> </ul>	
 <p><b>Dr. Huifeng Chang</b> <i>SVP, Chief Financial Officer</i></p>	<ul style="list-style-type: none"> <li>■ Co-Head of Sales &amp; Trading at CICC US in New York</li> <li>■ CEO of CSOP Asset Management in Hong Kong</li> <li>■ Vice President of Citigroup Equity Proprietary Investment in New York</li> </ul>	
 <p><b>Yan Zhuang</b> <i>SVP and Chief Commercial Officer</i></p>	<ul style="list-style-type: none"> <li>■ Head of Asia of Hands-on Mobile, Inc.</li> <li>■ Asia Pacific regional director of marketing planning and consumer insight at Motorola Inc.</li> </ul>	
 <p><b>Guangchun Zhang</b> <i>SVP and Chief Operating Officer</i></p>	<ul style="list-style-type: none"> <li>■ Vice President for R&amp;D and Industrialization of Manufacturing Technology at Suntech Power Holdings</li> <li>■ Centre for Photovoltaic Engineering at the University of New South Wales and Pacific Solar Pty. Limited.</li> </ul>	
 <p><b>Arthur Chien</b> <i>SVP and Chief Strategic Officer</i></p>	<ul style="list-style-type: none"> <li>■ CEO at Talesun Solar Co., CFO at Canadian Solar Inc.</li> <li>■ Managing director of Beijing Yinke Investment Consulting Co. Ltd.</li> <li>■ Chief financial officer of China Grand Enterprises Inc.</li> </ul>	
 <p><b>Jianyi Zhang</b> <i>SVP and Chief Compliance Officer</i></p>	<ul style="list-style-type: none"> <li>■ Senior advisor to several Chinese law firms</li> <li>■ Senior assistant general counsel at Walmart Stores, Inc.</li> <li>■ Managing Partner at Troutman Sanders LLP</li> </ul>	
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Experienced Independent Directors</p>	<p><b>Robert McDermott</b> <i>Chairperson of the Corporate Governance, Nominating and Compensation Committees</i></p>	<ul style="list-style-type: none"> <li>■ Partner with McMillan LLP, a business and commercial law firm</li> <li>■ Director and senior officer of Boliden Ltd.</li> </ul>
	<p><b>Lars-Eric Johansson</b> <i>Chair of the Audit and member of Governance, and Compensation Committees</i></p>	<ul style="list-style-type: none"> <li>■ CEO of Ivanhoe Nickel &amp; Platinum Ltd.</li> <li>■ Chairperson of the Audit Committee of Harry Winston Diamond</li> </ul>
	<p><b>Dr. Harry E. Ruda</b> <i>Chair of Technology and member of the Audit, Governance, Compensation Committees</i></p>	<ul style="list-style-type: none"> <li>■ 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</li> </ul>
	<p><b>Andrew Wong</b> <i>Member of the Audit, Corporate Governance, Compensation Committees</i></p>	<ul style="list-style-type: none"> <li>■ Senior Advisor to Board of Directors of Henderson Land Development Co.</li> <li>■ Director of Ace Life Insurance Co. Ltd., China CITIC Bank Corp., Intime Retail (Group) Co. Ltd. And Shenzhen Yantian Port (Group) Co. Ltd.</li> </ul>

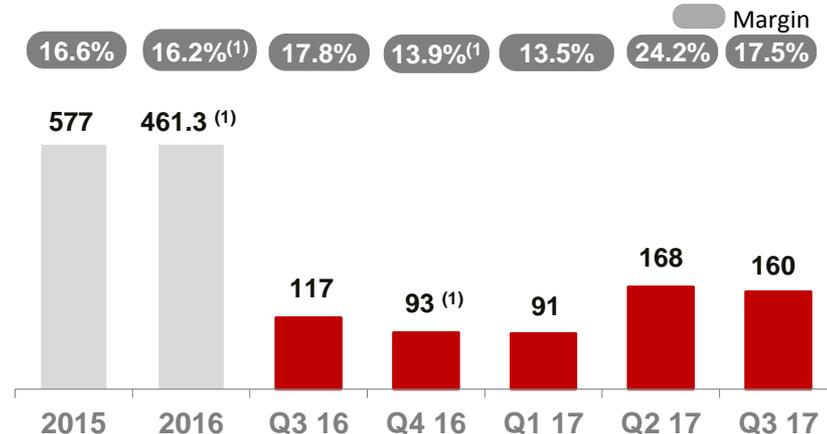
Source: Company information

# Income Statement Summary

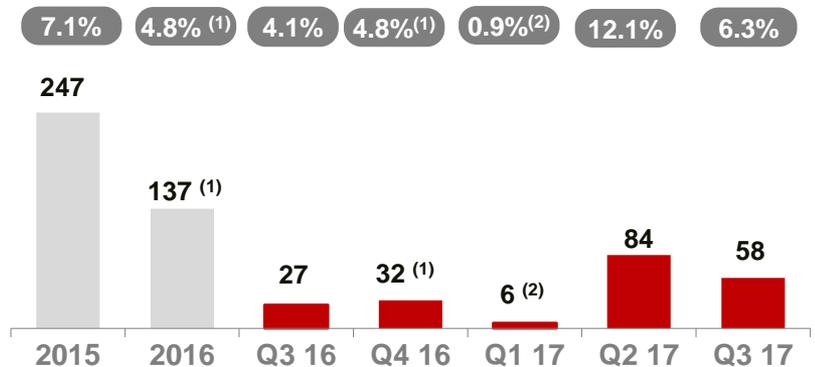
Revenue – US\$ million



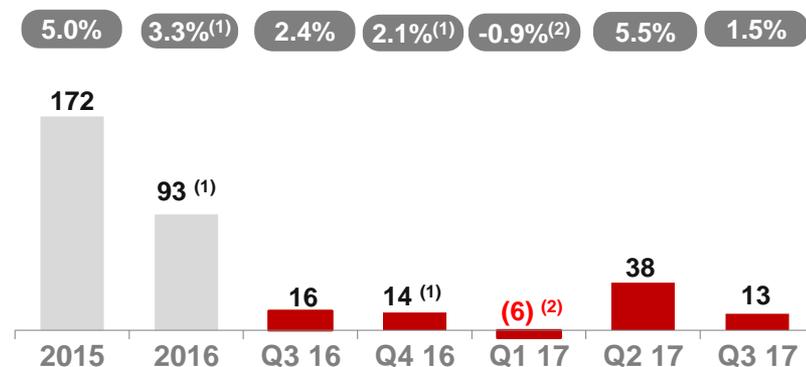
Gross Profit – US\$ million



Operating Income – US\$ million



Net Income – US\$ million



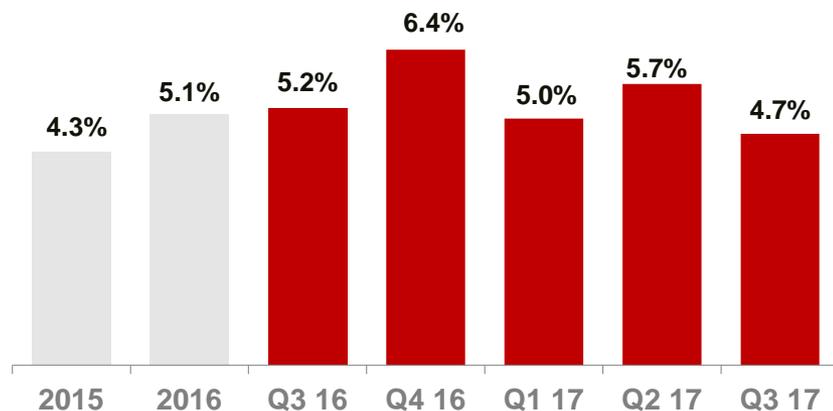
Source: Company filings

Note: (1) Non-GAAP adjusted numbers, excluding the AD/CVD true-up provision of \$44.1 million

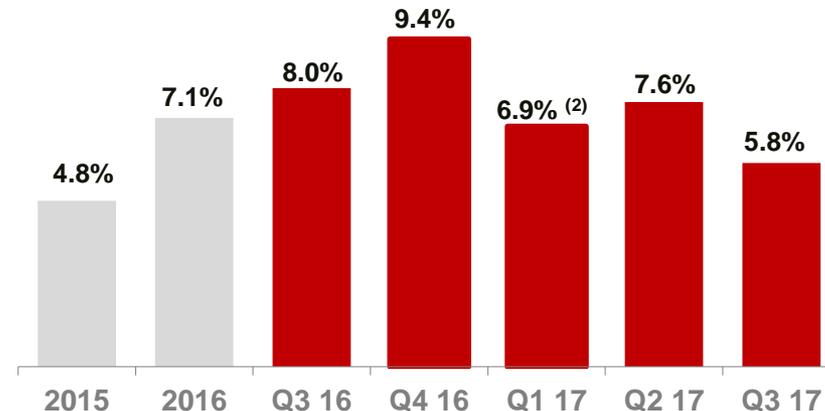
(2) Non-GAAP adjusted numbers, adjusted to exclude a one-time provision of \$8.6 million and net of income tax effect

# Operating Expenses as % of Net Revenue

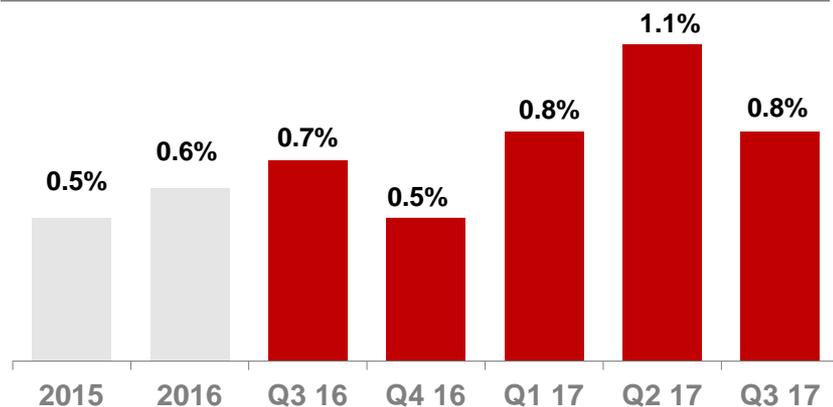
## Selling Expenses



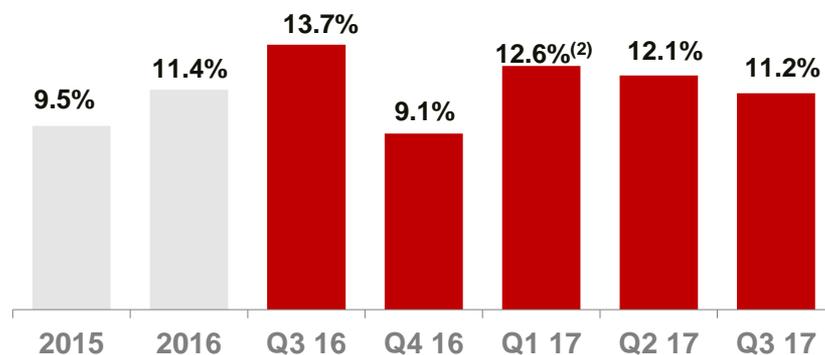
## General & Administrative Expenses



## Research & Development Expenses



## Total Operating Expenses



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 November 9, 2017

	Q3 2017	Q4 2017	FY2016	FY2017	YoY Δ%
<b>Module Shipments</b>	1,870 MW	1,650 MW to 1,750 MW	5,232 MW	6.7 GW to 6.8 GW	+28%
<b>Revenue</b>	\$912.2 mn	\$1.77 bn to \$1.81 bn	\$2.85 bn	\$4.05 bn to \$4.09 bn	+42%
<b>Gross Margin</b>	17.5% <sup>(1)</sup>	10.5% to 12.5% <sup>(1)</sup>	NA	NA	NA

1-Includes module business and project business

**THANK  
YOU!**

November 2017