

Investor Presentation

Second Quarter 2016 Update

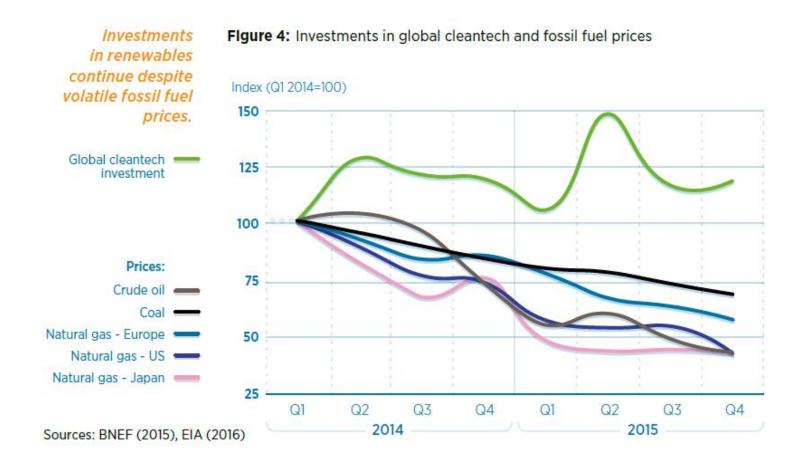
September 2016

CSIQ NASDAQ Listed

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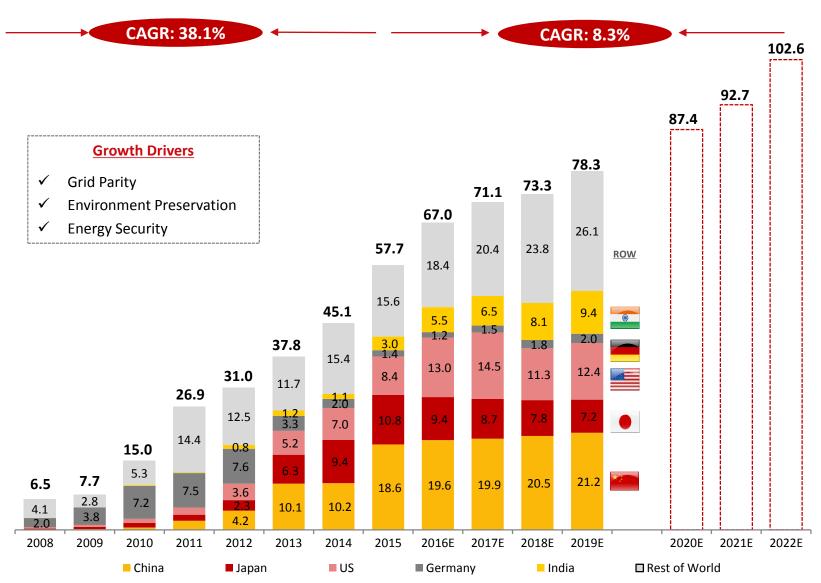
Renewable Energy Demand Continues to Grow



Investment in renewable energy reached a new record despite falling fossil fuel prices



Global Annual PV Installation to Break through 60GW in 2016

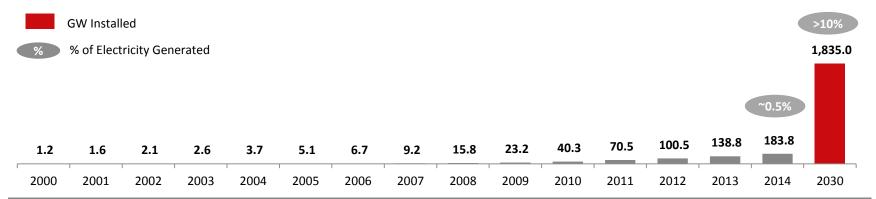


Source: Global PV module demand assumptions from Solarbuzz, IHS, Bloomberg New Energy Finance.

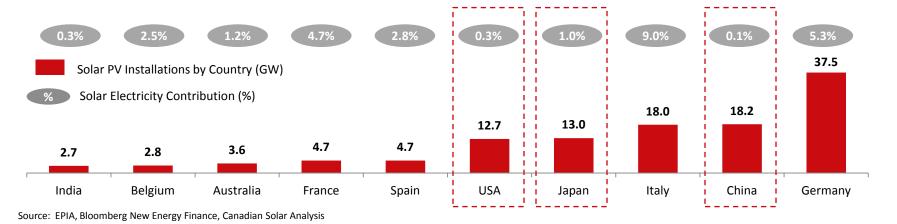
We Are at the Very Early Stages of Solar Adoption



Global Cumulative Solar PV Installations (GW)



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



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



Company Overview

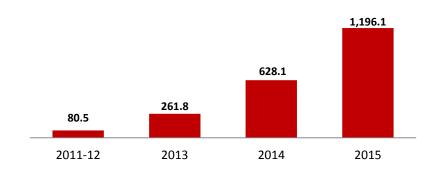
- Founded in Ontario, 2001
- Listed on NASDAQ (CSIQ) in 2006
- Over 8,000 employees globally
- Presence in 18 countries / territories
- > 16 GW of solar modules shipped cumulatively
- > 1.8 GWp solar power plants developed, built and connected (incl. Recurrent)
- Top 2 solar company by MW shipped, revenue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



Energy Business: Industry Leading Globally Diversified Project Pipeline

20.4 GWp

total project development pipeline

2.4 GWp

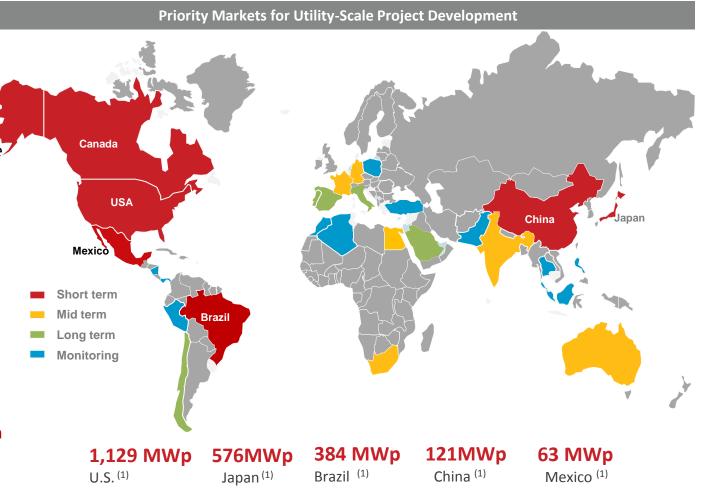
total contracted / late-stage project pipeline⁽¹⁾

~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

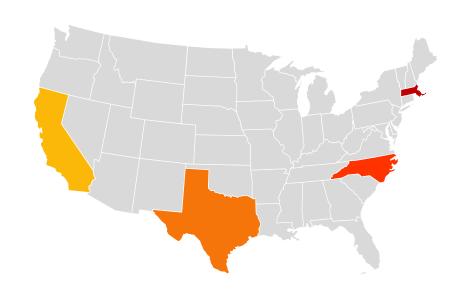
1,129 MWp

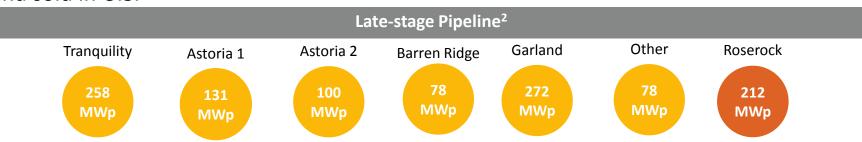
Late-stage pipeline²

>842 MWp¹

Track record of projects developed and sold in U.S.

U.S. Project Development Business Footprint





Commercial Operation by the end of 2016



Japan Utility-Scale Solar Project Pipeline



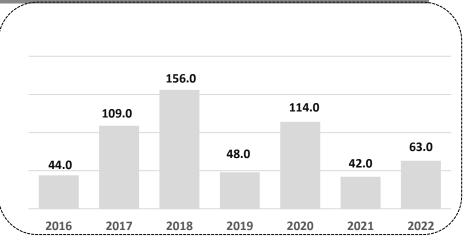
Total Solutions business – Japan

576 MW_p (1) pipeline of projects in development 21 MW_p Owned and operated

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



Utility-Scale COD Schedule² - MWp



- (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





2016 Grid Connection Target

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

Group II: 0.8 RMB/kWh Group III: 0.88 RMB/kWh Group III: 0.98 RMB/kWh

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

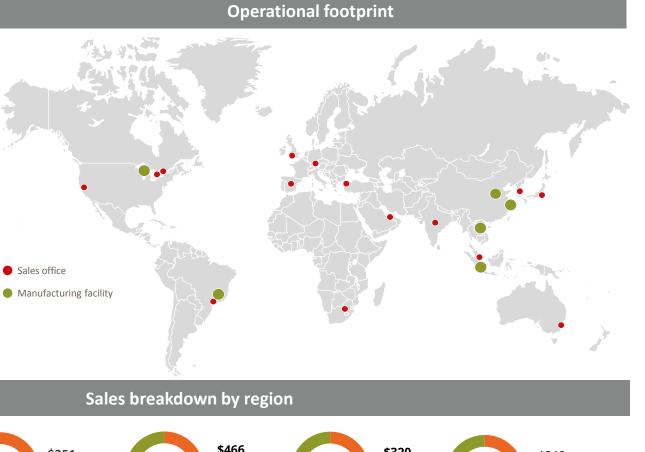
Module Business: Global Footprint With Diversified Customer Base

> 15.0 GW

cumulative modules sold to date

Customers in over 90 countries

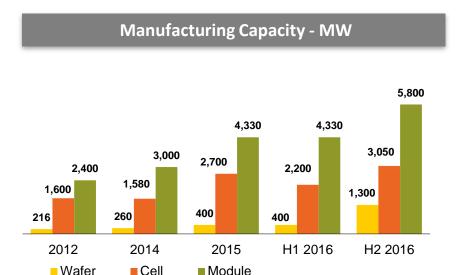
with offices in 18 countries



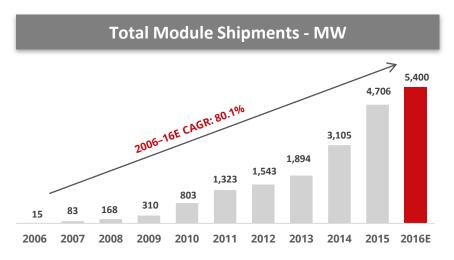




Capacity Expansion to Optimize Technology and Cost

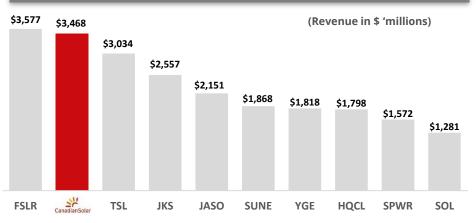


- Technology upgrade New products, new process, new design
 - ✓ Diamond wire saw wafer
 - ✓ Black silicon
 - ✓ Mono PERC
 - ✓ Super 5
- Global Manufacturing Footprint China, Canada, Vietnam, Indonesia, Thailand, Brazil
 - ✓ China
 - ✓ Thailand
 - ✓ Canada
 - ✓ Vietnam
 - ✓ Brazil
- Operation efficiency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



Source: Company information

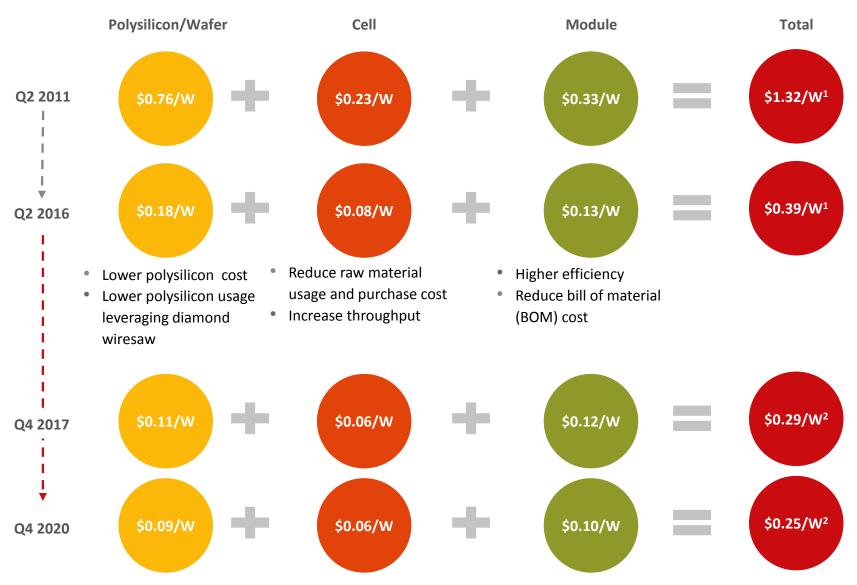
#2 Solar Energy Solutions Company by Revenue in 2015



Source: FactSet Data:



Industry Leading Manufacturing Cost Structure



Source: Company information

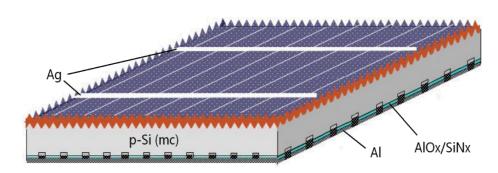
- 1. Blended manufacturing cost in China
- 2. Based on internal ingot, wafer, cell and module manufacturing in China

Competitive Pipeline of Homegrown Technologies

ONYX I – Black Silicon



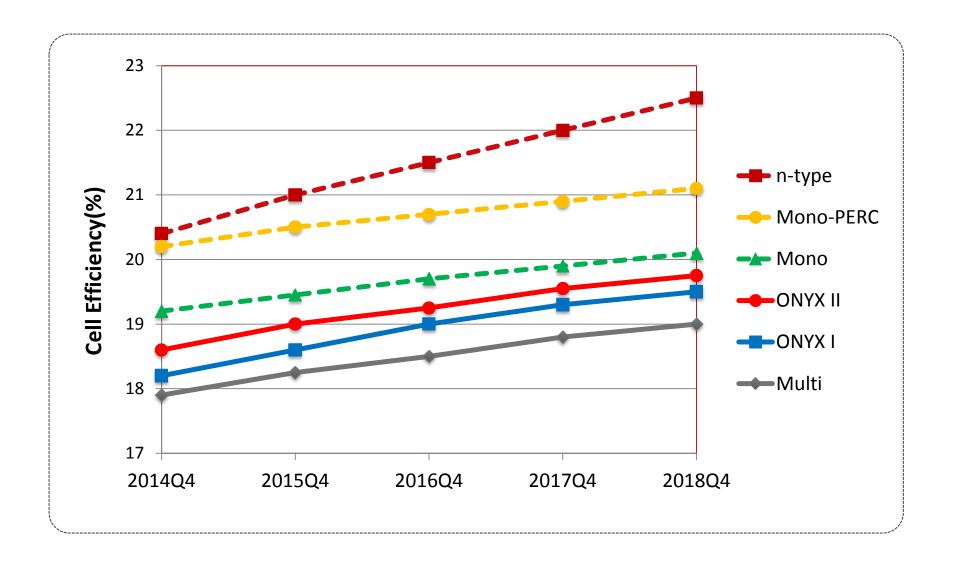
Mono PERC



- 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 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

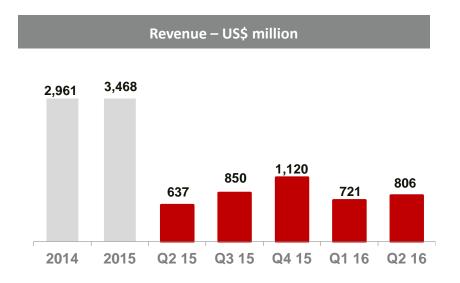


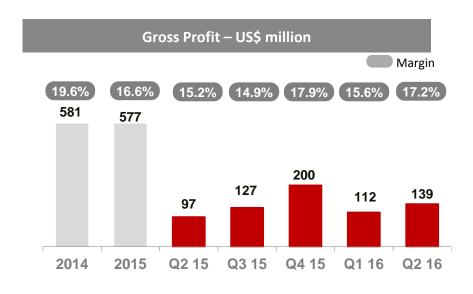
Experienced Board & Senior Management

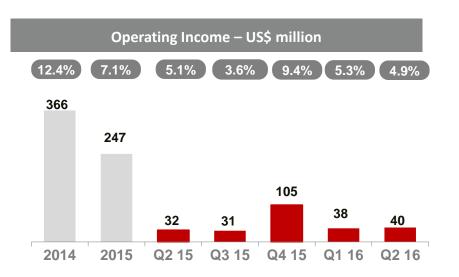
	Name / Title	Work Experience		
9	Dr. Shawn Qu Chairman, President & CEO (Director)	 Founded Canadian Solar in 2001, and has since then, firmly established the company as a global leader of the solar industry Director & VP at Photowatt International S.A. Research scientist at Ontario Hydro (Ontario Power Generation Corp.) 		
	Dr. Huifeng 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. 		
Experienced Independent Directors	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. 		

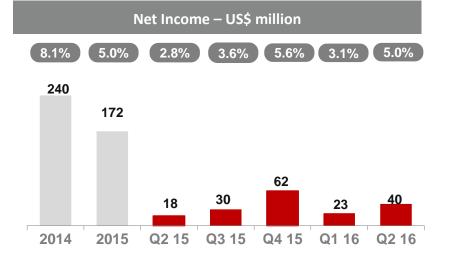
Source: Company information

Income Statement Summary

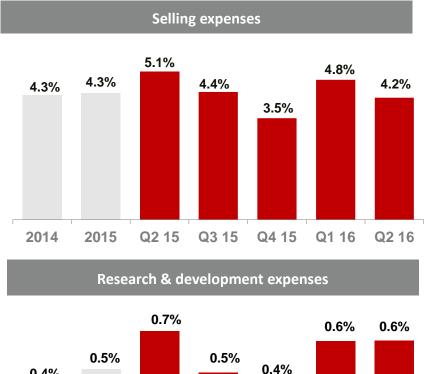


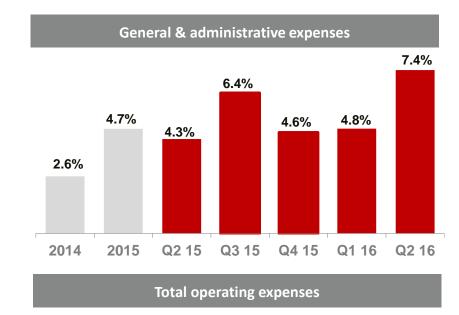


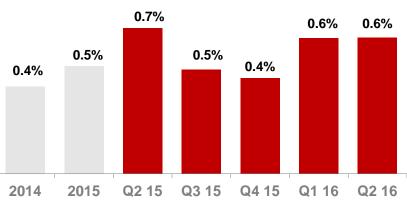


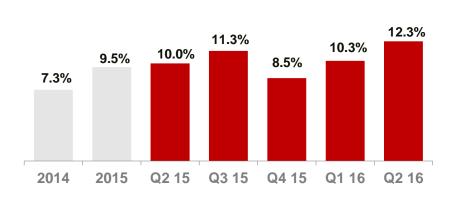


Operating Expenses as % of Net Revenue





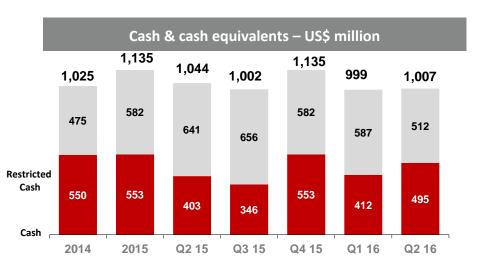


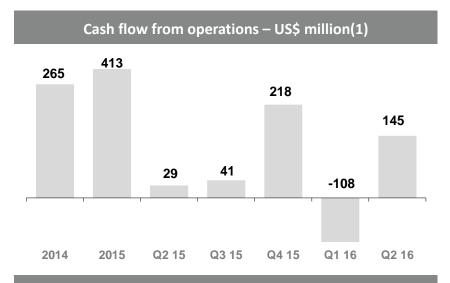


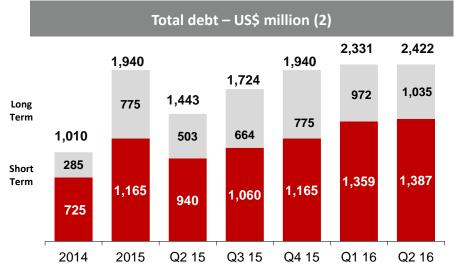
Source: Company filings

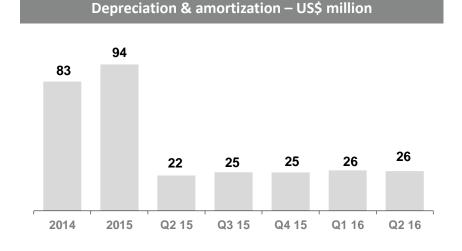
Note: Percentages are of the total net revenue in the corresponding period.

Selected Balance Sheet & Cash Flow Items









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 O2 2016 is US\$128 million.



Guidance as of August 18, 2016

	Q2 2016	Q3 2016
Module shipments	1,290 MW	1,200 MW – 1,300 MW
Revenue	\$ 806 m	\$ 660 m to \$ 710 m
Gross margin	17.2%	14% – 16% ⁽¹⁾

FY2015	FY2016	ΥοΥ Δ%
4.7GW	5.4 GW – 5.5 GW	+14.9%
\$3.47 bn	\$3.0 bn to \$3.2 bn	-10.7%
NA NA		NA

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.

¹⁻Includes module business and project business



THANK YOU!

September 2016