CanadianSolar
Make The Difference

Investor Presentation

Fourth Quarter 2015 Update

March 14, 2016

CSIQ
Nasdaq Listed

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Company Overview

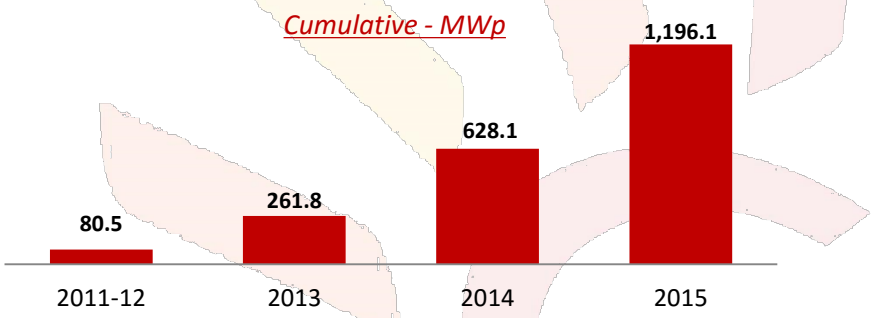
- Founded in Ontario, 2001
- Listed on NASDAQ (CSIQ) in 2006
- Over 8,000 employees globally
- Presence in 18 countries / territories
- > 13 GW of solar modules shipped cumulatively
- > 1.8 GWp solar power plants developed, built and connected (incl. Recurrent)
- **Top 2 solar company by MW shipped, revenue and profits in 2015***

Global Footprint and Brand

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**



Source: Factset, company analysis
*Non-GAAP ** Excludes Recurrent Energy Installations

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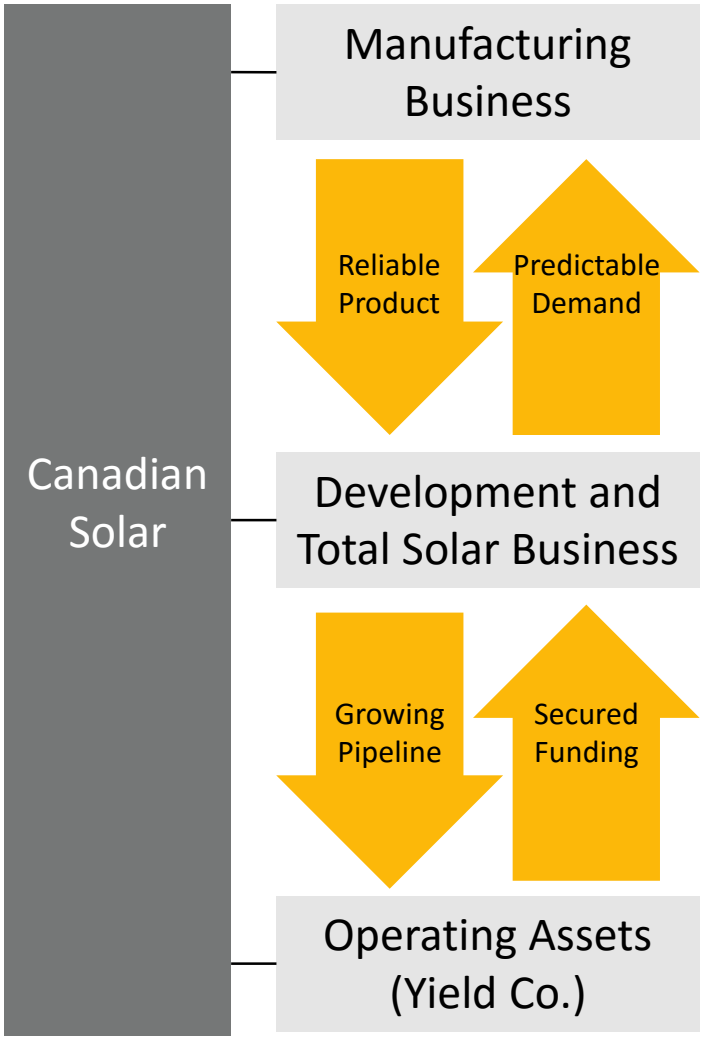
Strategic Positioning

Business Model



Key to Success

Profitable Growth

Price premium	Competitive cost	High ROA

Branding	Technology	Scale	Focus

Strong Underwriting

Location	Professionals	Finance

CAFD Growth

Predictable project pipeline	Low cost of capital

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Outlook for Global Solar Industry is Positive

- Electricity is not going out of fashion,
  with global demand growth expected to track GDP
- Renewable energy additions already surpasses conventional energy
  Solar is expected to be the fastest growing source of electricity
- Global annual PV installation to break through 60GW in 2016
  Near term demand is forecast to be healthy
- We are at the early stages of solar adoption, and will benefit from the significant upside in demand for solar PV over the next 15 years

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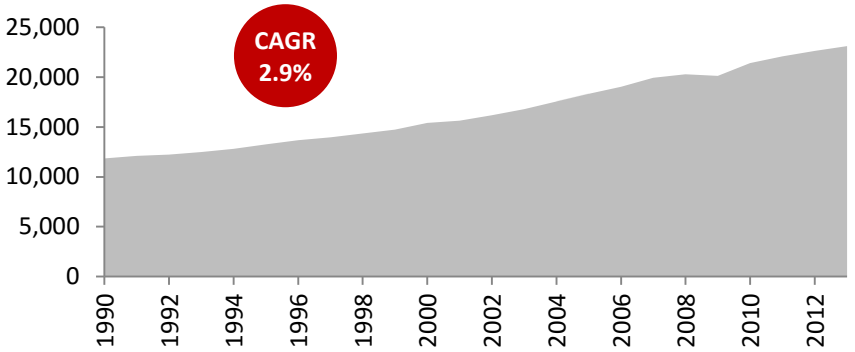
Solar Energy Will Outgrow Conventional Energy

Continuous Electricity Demand

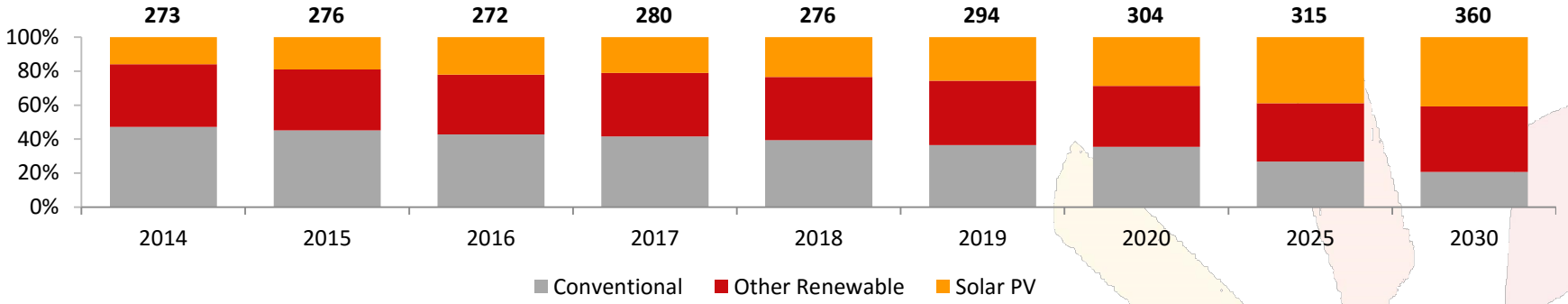
- Electricity consumption is expected to grow in line with GDP
- The momentum of world nominal GDP growth persists with 5.4%(1) CAGR in the next 30 years

Electricity Generation Growth (TWh)



Source: BP 2014 Statistical Review of World Energy
(1) IHS Economics calculation

Global Capacity Additions (GW)



- In 2014, solar PV and other renewable energy capacity additions surpassed conventional energy for the first time, and solar PV is expected to dominate
- Aging fleet of coal and nuclear assets are expected to be decommissioned
- Environmental compliance is expected to force cost of conventional sources of electricity higher
- Cost of solar energy is expected to continue to decline as technology improves and economies of scale from widespread adoptio n prevail
- Over the next 20 years the solar industry is expected to generate over US$5tn of cumulative revenue

Source: Bloomberg New Energy Finance, Wall street research

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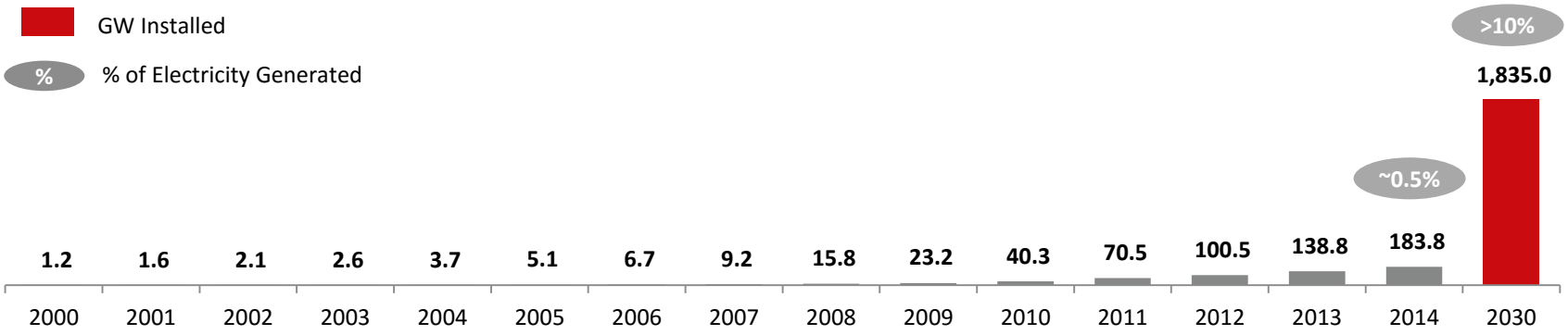
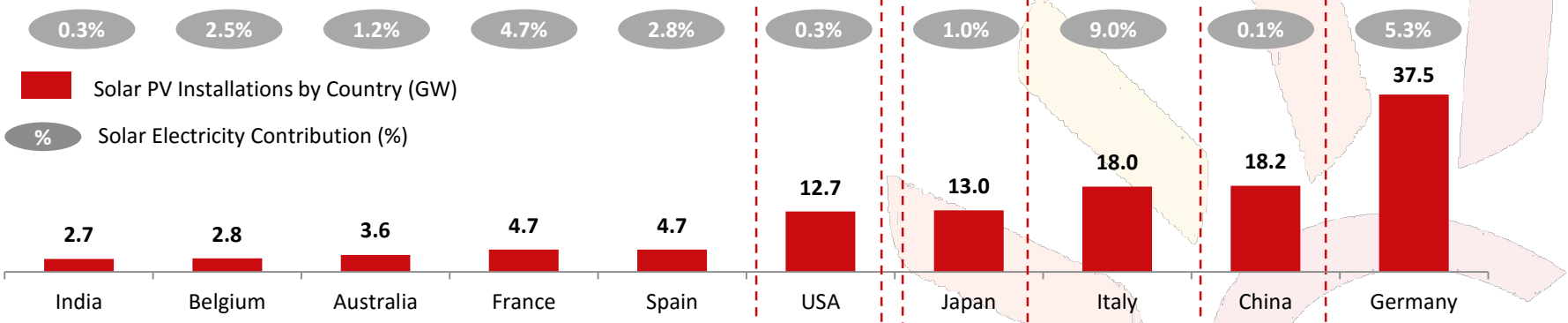
We Are at the Very Early Stages of Solar Adoption

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

Global Cumulative Solar PV Installations (GW)



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



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

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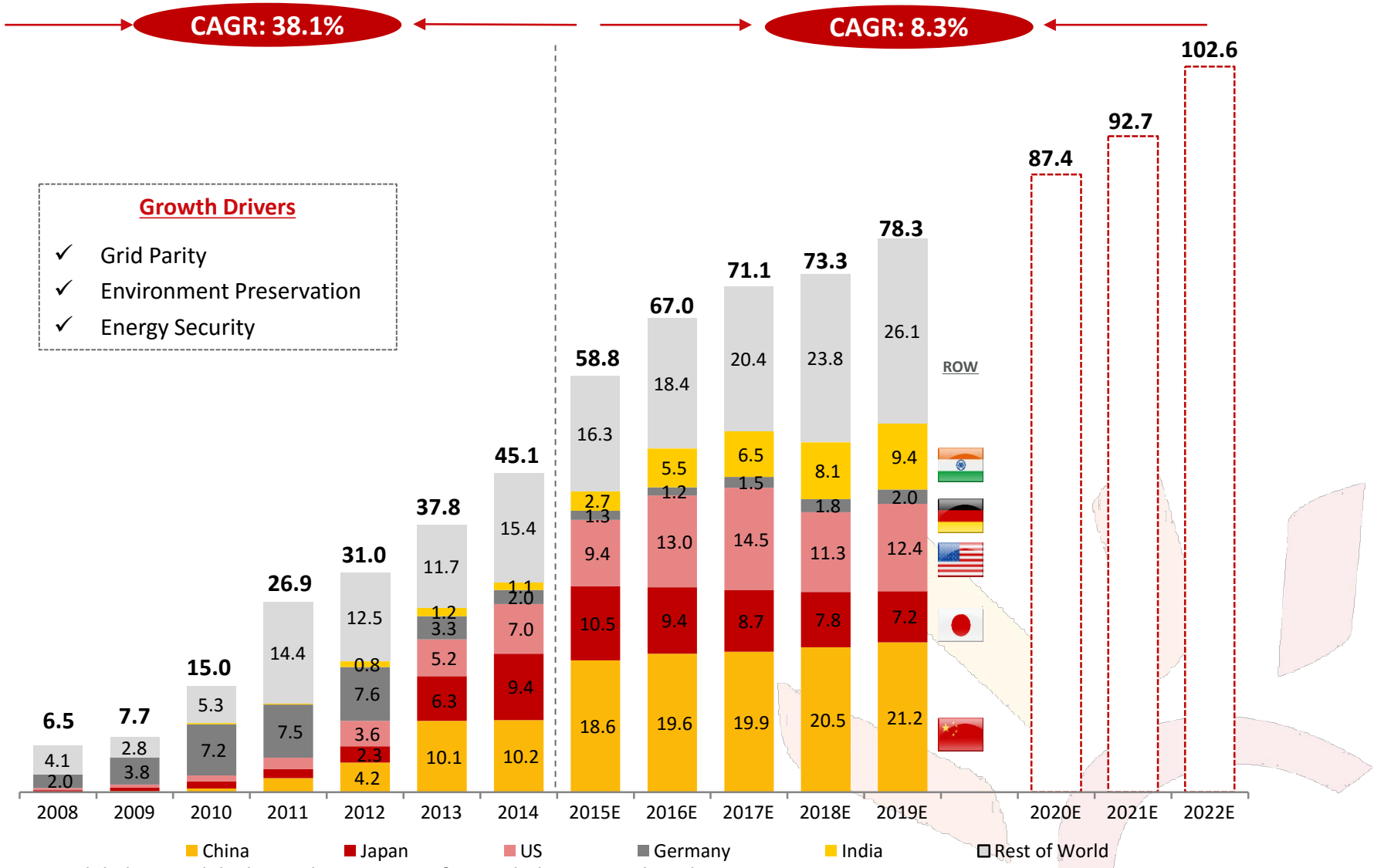
Global Annual PV Installation to Break through 60GW in 2016



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

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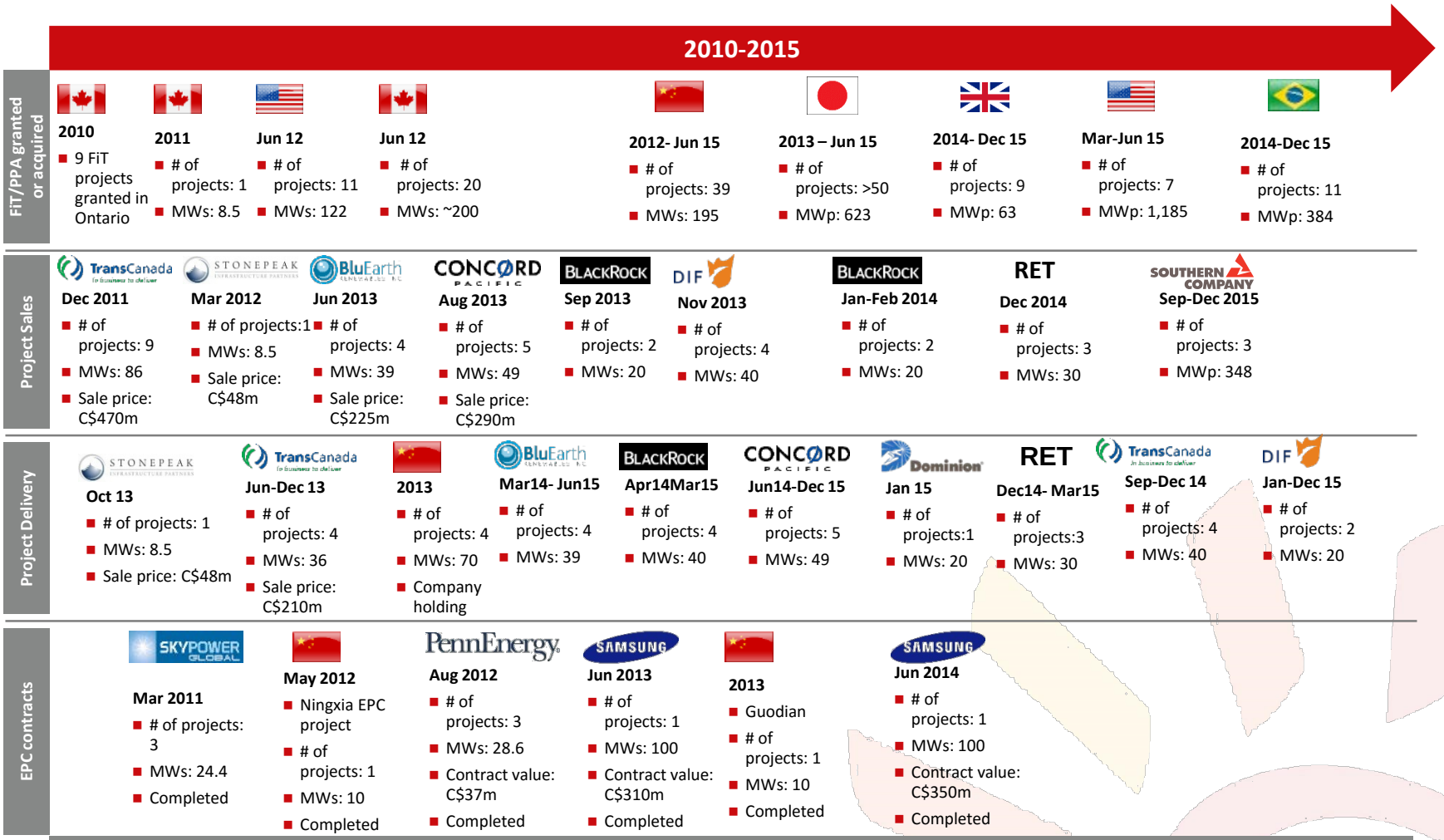
Proven Track Record Developing and Monetizing Solar Power Projects



Since entering the market in 2009, Canadian Solar has rapidly grown its total solutions business

Source: Company information
Note: All MW shown on this slide are in MW_{AC} unless otherwise stated

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Industry Leading Globally Diversified Project Pipeline

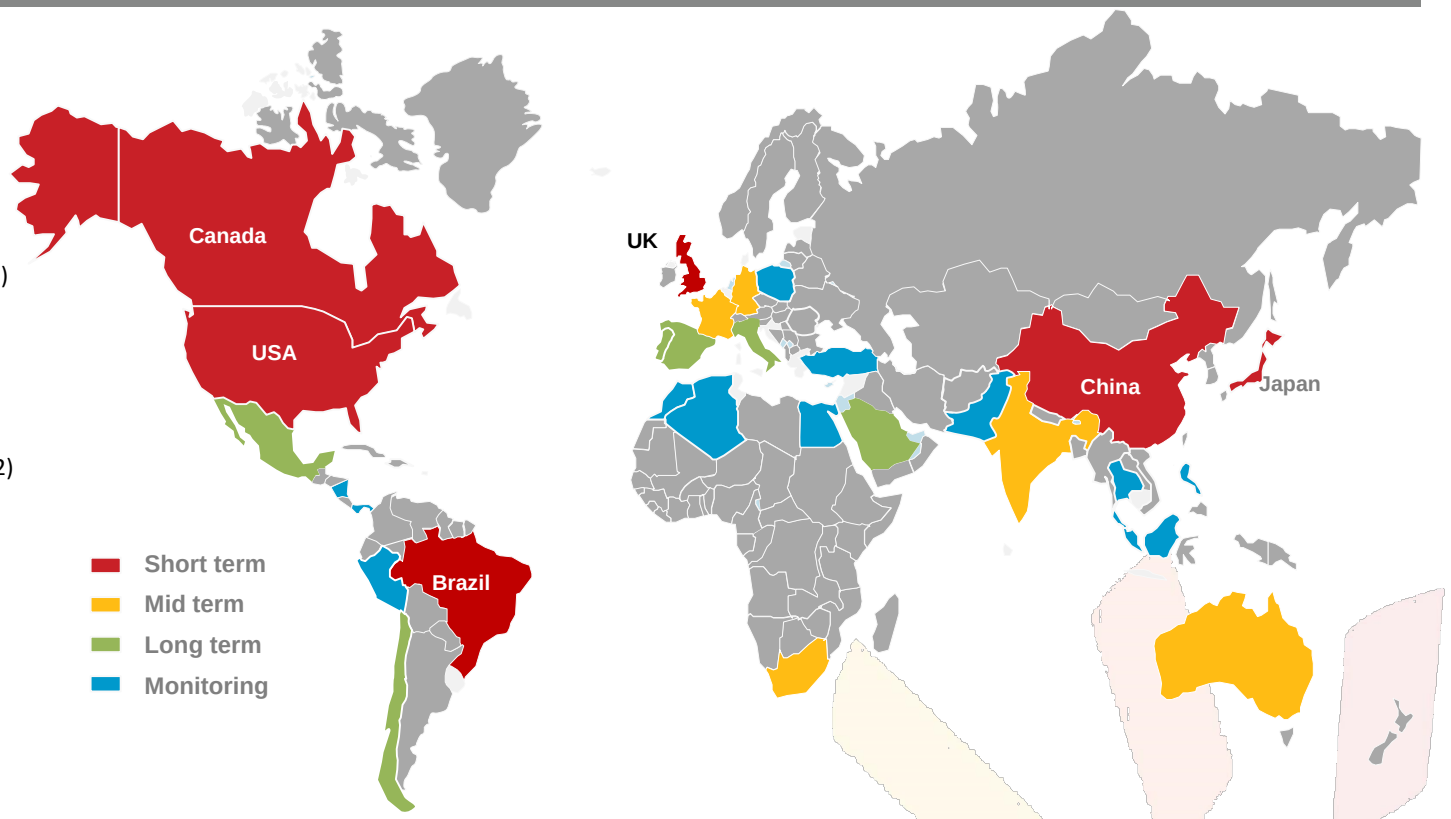
10.3 GWp
total project development pipeline

2.0GWp
total contracted / late-stage project pipeline(1)

> 8.3 GWp
total early-mid stage development pipeline(2)

~398 MWp
Solar power plants owned and operated

Priority Markets for Utility-Scale Project Development



771 MWp U.S. (1)

384 MWp Brazil (1)

57 MWp UK (1)

150 MWp China (1)

582 MWp Japan (1)

Canadian Solar has a globally diversified pipeline of contracted / late stage projects in low risk geographies

Source: Company information as of March 10, 2015

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.

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Market Leader in the U.S. with 786 MWp Project Backlog

Includes Recurrent Energy Across North America

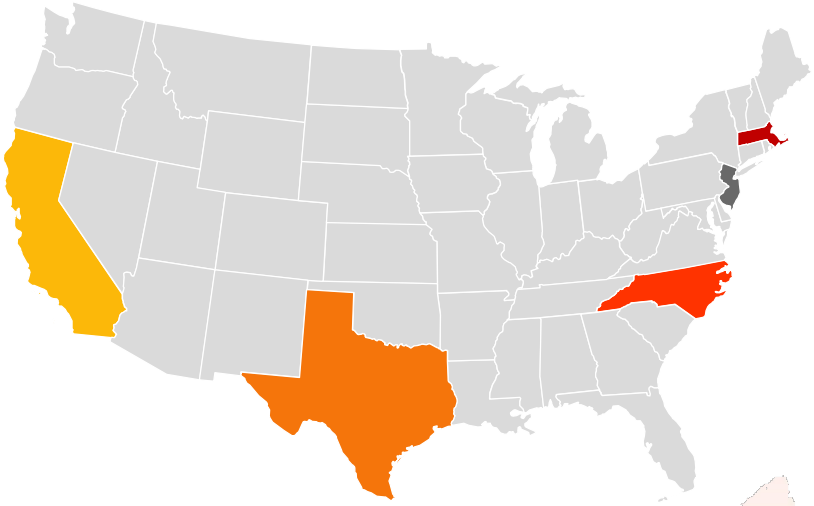
2.6 GWp
Early-stage pipeline

771 MWp
Late-stage pipeline[2]

>842 MWp[1]
Track record of projects developed and sold in U.S.

>1.0 GWp
In Construction 2015

U.S. Project Development Business Footprint



Late-stage Pipeline

Tranquility[2]	Mustang[2]	Astoria 1	Astoria 2	Barren Ridge	Garland[2]	Roserock[2]
126 MWp	114 MWp	131 MWp	100 MWp	62 MWp	133 MWp	104 MWp

Commercial Operation by the end of 2016

1. Includes all of Recurrent Energy's and Canadian Solar (US only) projects developed and delivered; 2. Net MWp owned by Canadian Solar

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U.S. Project Build-out is Fully Funded

- All U.S. projects have closed financing
- Financing proceeds and commitments total $3.1B
- Loan draws are in process across the portfolio and tax equity funding will occur when key construction milestones are satisfied (near COD).

Project	Lender(s)*	Tax Equity / JV Investor	Debt Commitments (including ITC Bridge)	Letter of Credit Facilities	Tax Equity / JV Investor Commitment
Tranquillity	Bank Club* + CIBC	Southern Company	$259M		
Mustang	Santander	US Bancorp	$165M		
Barren Ridge	Bank Club*	US Bancorp	$115M		
Astoria	Bank Club*	General Electric	$211M		
Roserock	Bank Club*	Southern Company	$242M		
Garland	Bank Club*	Southern Company	$395M		
Astoria 2	Bank Club*	General Electric	$165M		
Total			**$1,552M**	**$257M**	**$1,329M**

* Bank Club includes Santander, Key Bank, NordLB, CIT, Rabo.

Japan Utility-Scale Solar Project Pipeline

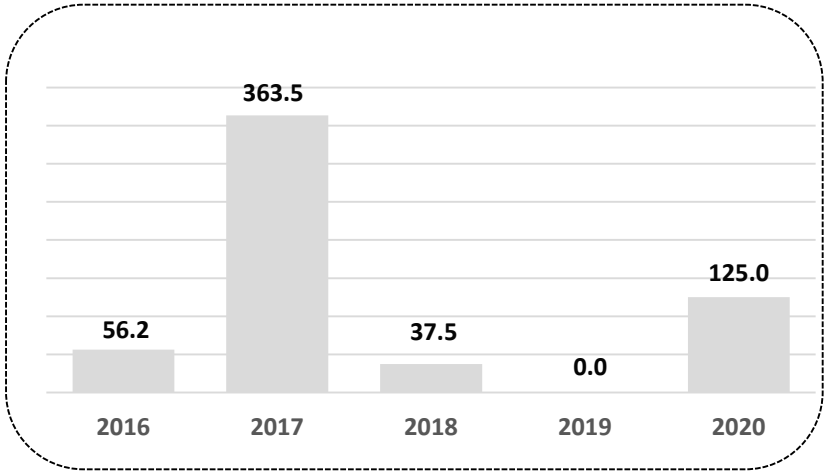
Total Solutions business – Japan

582 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 Schedule[2] - 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 **81.5 MWp**
- Projects ready-to-build **107.4 MWp**
- Projects with signed interconnection agreements **200 MWp**

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China Utility-scale Solar Project Pipeline

Energy Business – China

Source: Company information as of March 10, 2016

2016 Grid Connection Target

During 2016, the Company expects to connect a total of **150 MWp** solar plants to the grid, including:

- three solar plants that have been connected in the first quarter of 2016, totaling **15.7 MWp** (1).
- a **10MWp** (2) project in Jiangsu, a **22 MWp** (3) project in Xinjiang and other projects in Shanxi, Hebei, Shandong and Jiangsu provinces.

*Two projects in Jiangsu, totaling 4.7 MWp was connected to the grid in Q1 2016.

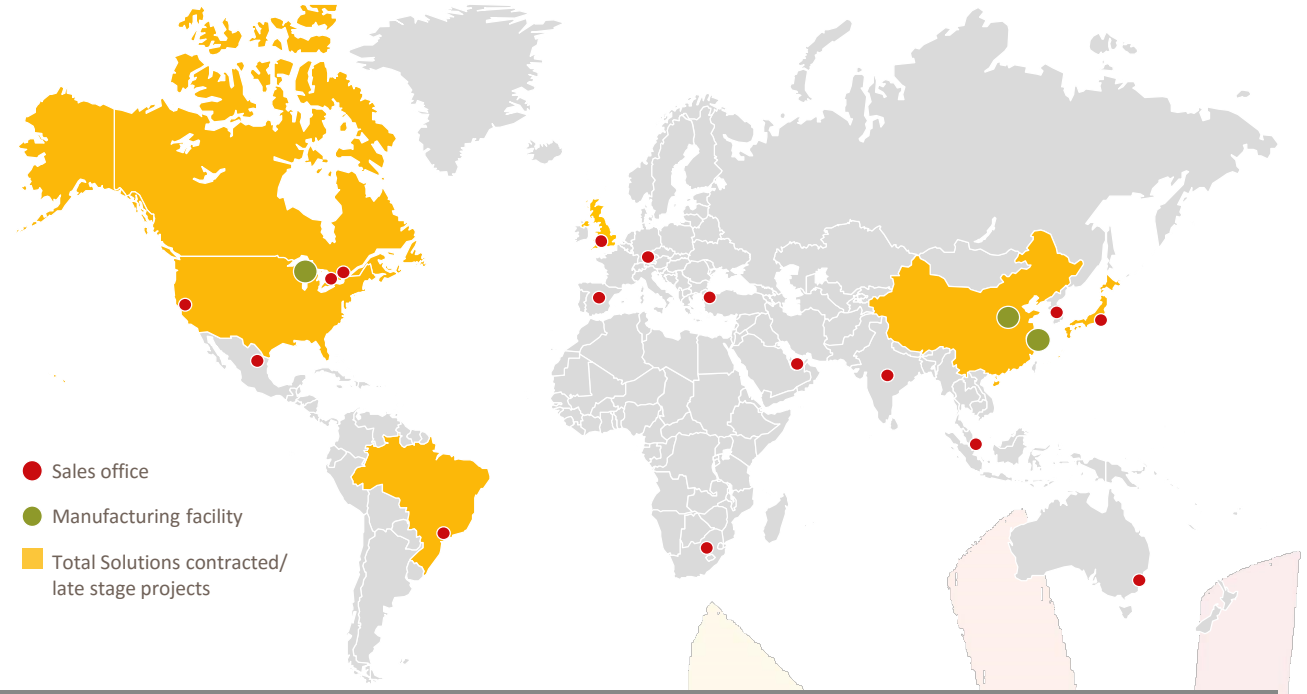
Global Footprint With Diversified Customer Base

> 13.0 GW
cumulative modules sold to date

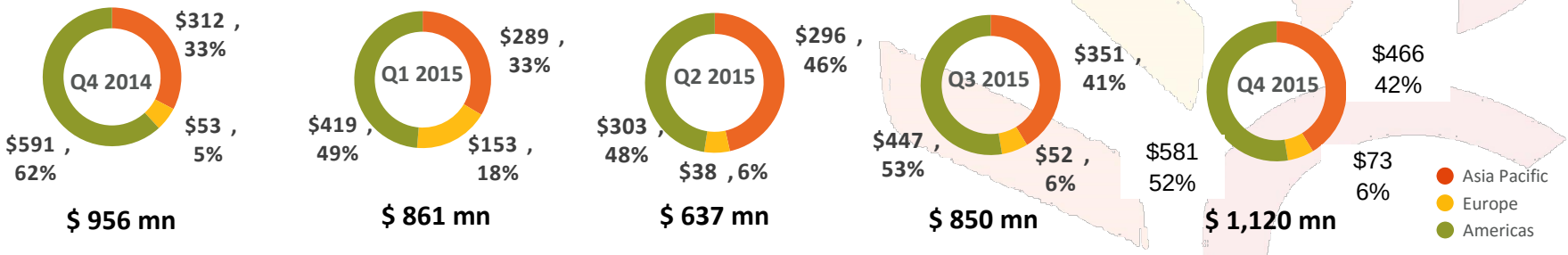
Customers in over 90 countries
with offices in 18 countries

Established projects business
currently delivering services in 6 countries

Operational footprint



Sales breakdown by region



Source: Company information

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Bankable Brand with High Quality Products

Commercial & Utility-Scale

MaxPower CS6X-P | DIAMOND CS6K-P-PG | CS6P-M | CS6P-P

Residential

CS6V-M | CS6V-P | All-black CS6K | ONYX CS6K

International Environmental & Quality Management Standards

- ISO 9001:2008 Quality Management System
- QC080000:2005 HSPM Hazardous Substance Process Management
- ISO 14001 Environment Management System
- ISO TS16949:2009 First PV manufacturer to adopt ISO TS16949 for PV quality control
- OHSAS 18001 Occupational Health and Safety

International Testing Standards

- IEC 61215 & IEC 61730, UL 1703 & UL 790 & CEC
- CE conformity, MCS (EN45011)
- REACH Compliance

√ IEC 61215
√ IEC 61730
√ IEC 61701: Salt Mist Corrosion
√ Ammonia Resistance
√ PID free
√ REACH Compliant

Source: Company information

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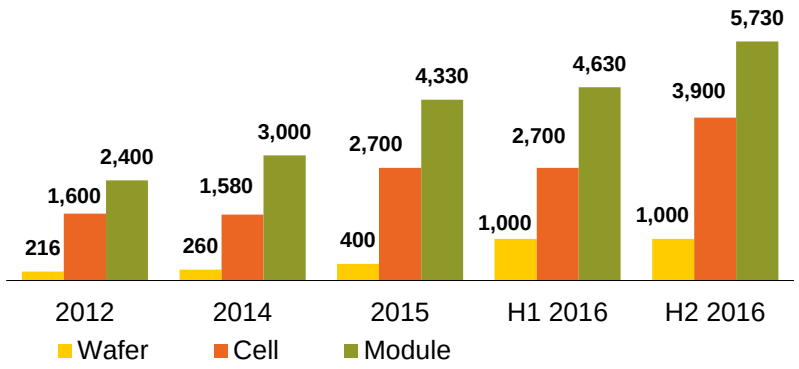
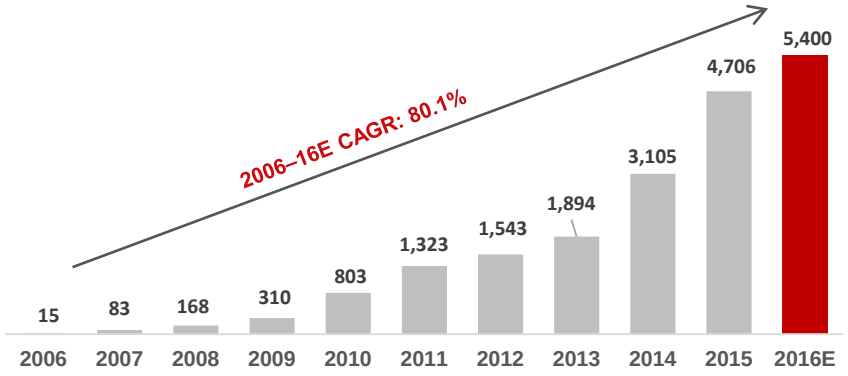
Reverse Pyramid Manufacturing Capacity Structure

Manufacturing Capacity - MW



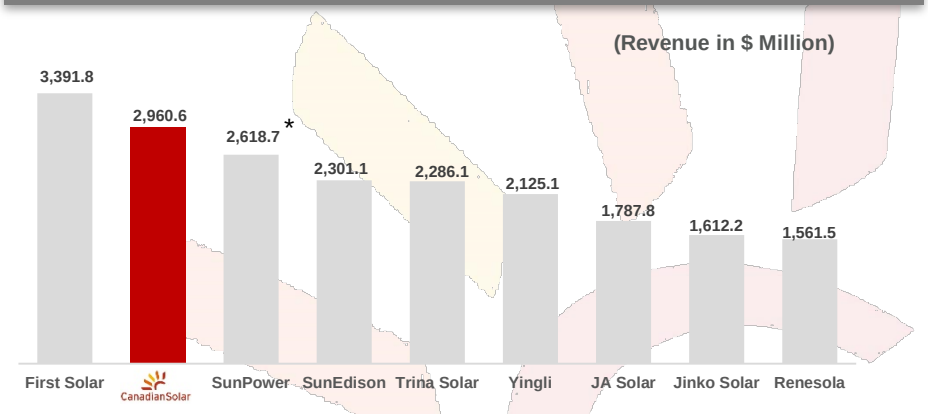
- Wafer manufacturing capacity is expected to reach 1.0 GW by June of 2016
- Cell manufacturing capacity at Suzhou plant, Jiangsu Province, reached 2.2 GW by the end of 2016; Funning plant will add an additional 500MW of cell manufacturing capacity to reach 1.0 GW by July of 2016
- A new 700 MW cell manufacturing plant, to be located in South East Asia, is expected to be commissioned in the second half of 2016.
- Module manufacturing capacity by the end of 2016 includes 4.1 GW in China, while approximately 1.63 GW will be at existing and new locations outside China.

Total Module Shipments - MW



Source: Company information

#2 Solar Energy Solutions Company by Revenue in 2014



Source: FactSet Data; * Non-Gaap

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Industry Leading Manufacturing Cost Structure

	Polysilicon/Wafer*		Cell*		Module		Total1
Q2 2011	$0.76/W	+	$0.23/W	+	$0.33/W	=	$1.32/W[1]
Q2 2015	$0.19/W	+	$0.10/W	+	$0.15/W	=	$0.44/W[1]
Q4 2015	$0.19/W	+	$0.09/W	+	$0.13/W	=	$0.41/W[1]

- Secure LT wafer supply agreement at competitive cost
- Benefit from lower cost/usage of silicon
- Explore supply diversi-fication opportunities

- Reduce raw material purchase cost
- Reduce raw material usage
- Increase throughput

- Reduce cell to module power loss
- Reduce raw material purchase cost
- Redesign Modules

Source: Company information, * Includes purchased wafers and cells.
1. Blended manufacturing cost in China

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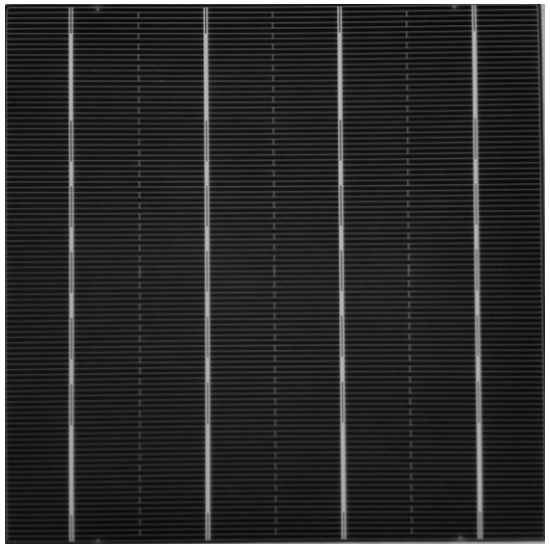
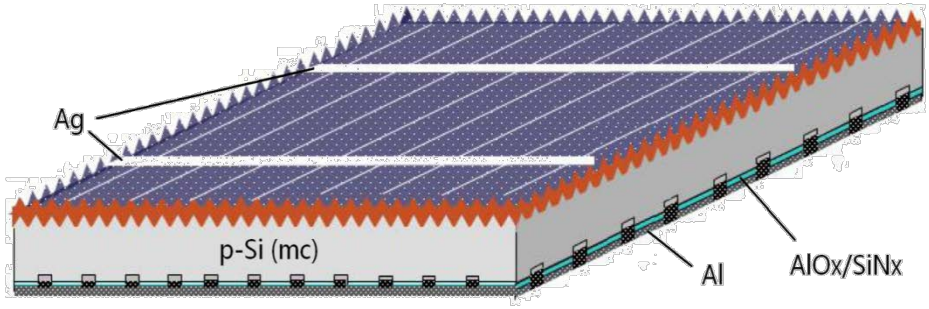
Competitive Pipeline of Homegrown Technologies

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 reache 290 Watt
- Production roll out begin in 2016 Q1, will gradually ramp up within the year

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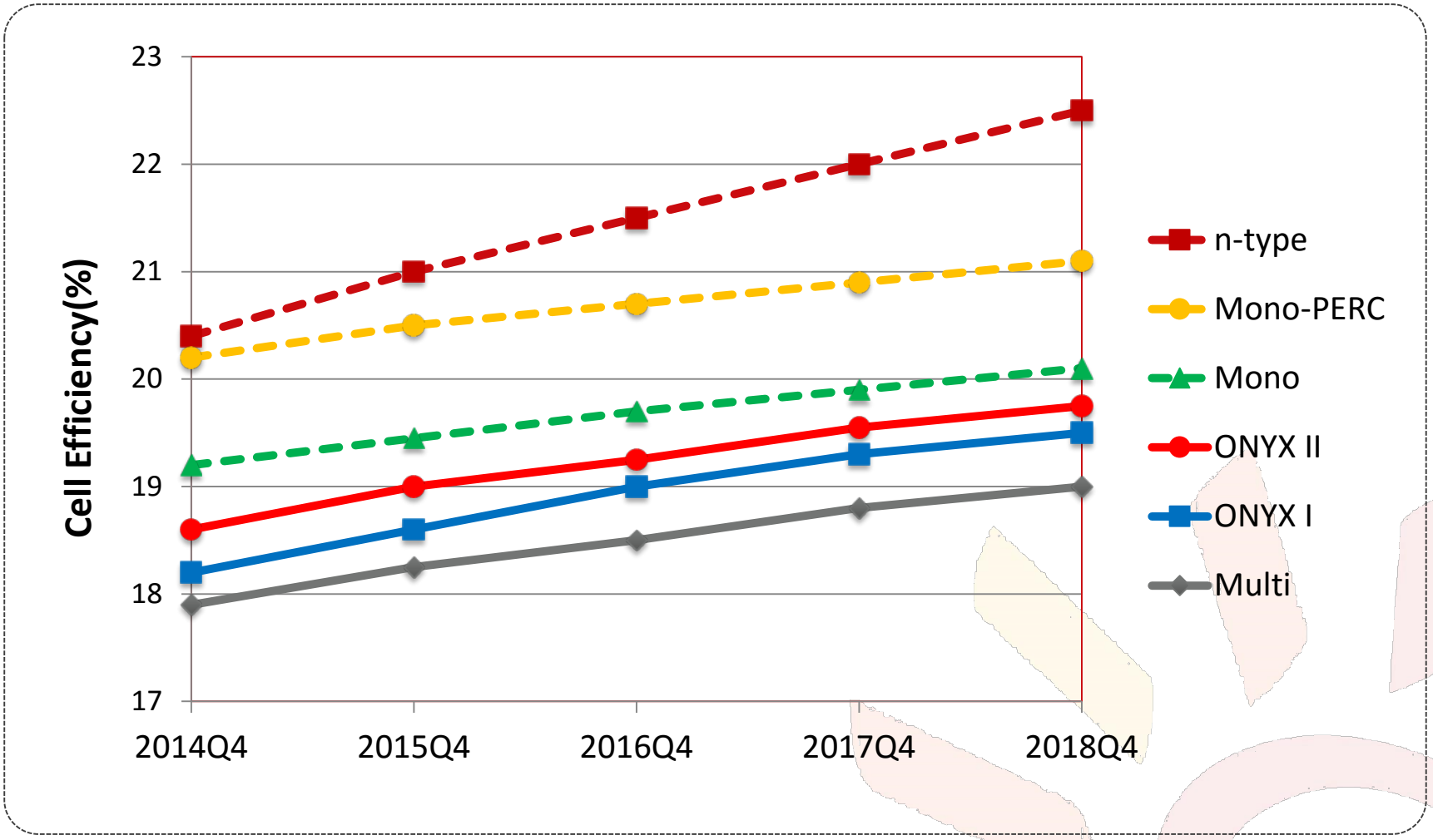
Cell Efficiency Roadmap



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Experienced Board & Senior Management

	Name / Title	Work Experience
	**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.)
	**Michael Potter** *SVP and Chief Financial Officer*	■ Corporate Vice President and CFO of Lattice Semiconductor Corp. ■ Senior Vice President and CFO of NeoPhotonics Corp.
	**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.
	**Huifeng Chang** *SVP, Corporate Strategy and Business Development*	■ 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
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

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Strategic Imperatives

Differentiation	▪ Leverage existing downstream expertise to expand utility scale project opportunity and capturing value through the launch of a YieldCo ▪ Expand residential and commercial system kits and turn key solutions
Cost	▪ Continuously reduce manufacturing cost to remain competitive
Scale	▪ Expand capacity selectively in a cost-efficient manner to remain among top 5 suppliers to leverage scale and target 10% market share ▪ Develop local manufacturing partnerships in key markets
Technology	▪ Focus research and development effort on achieving solar cell efficiency improvements and on the introduction of new technologies

Canadian Solar aims to maintain profitability and to be the global leader in the manufacture and sale of solar module products and the development, ownership and operations of solar power plants.

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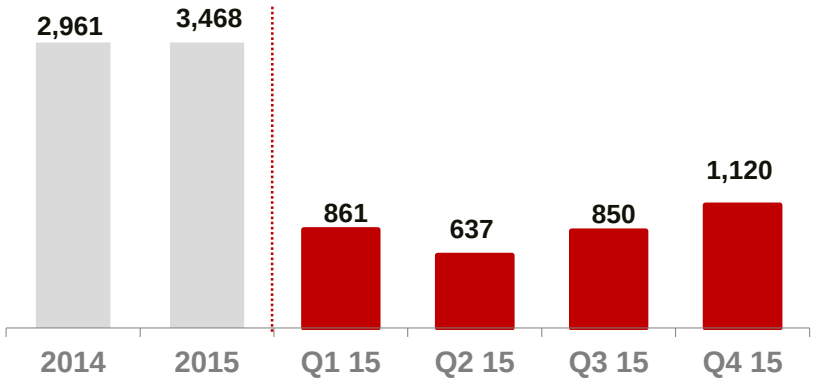
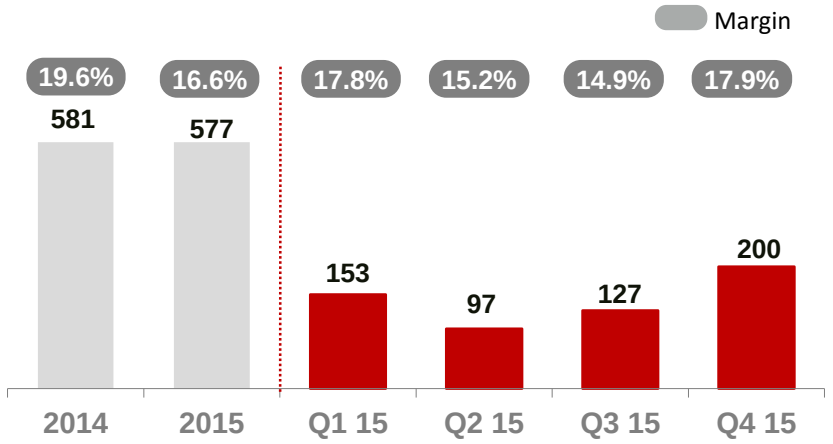
Income Statement Summary

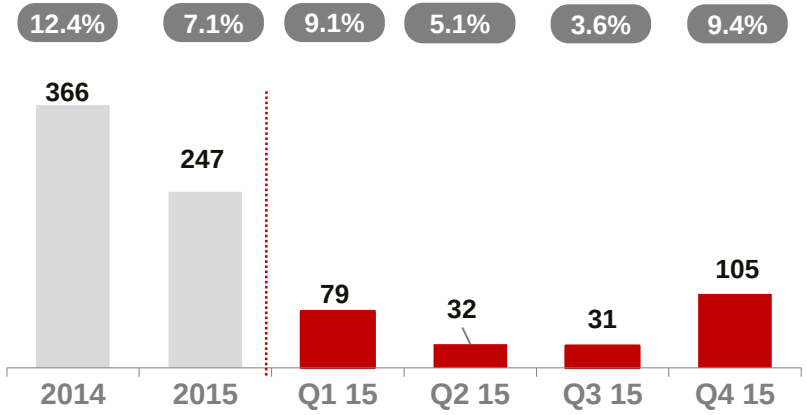
Revenue – US$ million



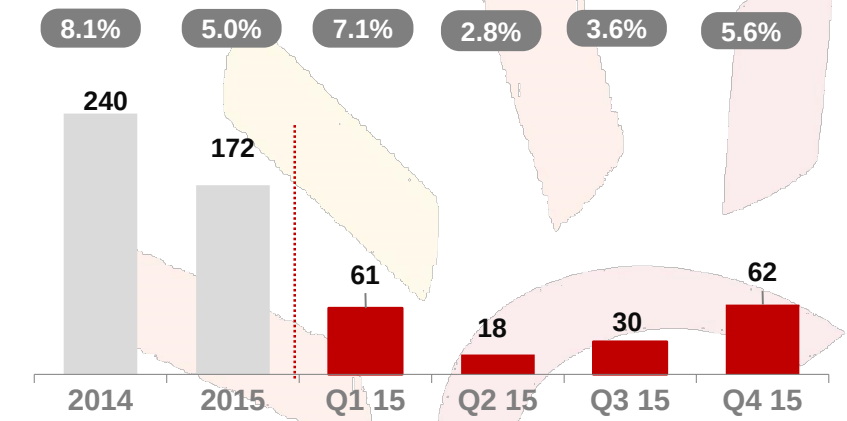
Gross Profit – US$ million



Operating Income – US$ million



Net Income – US$ million



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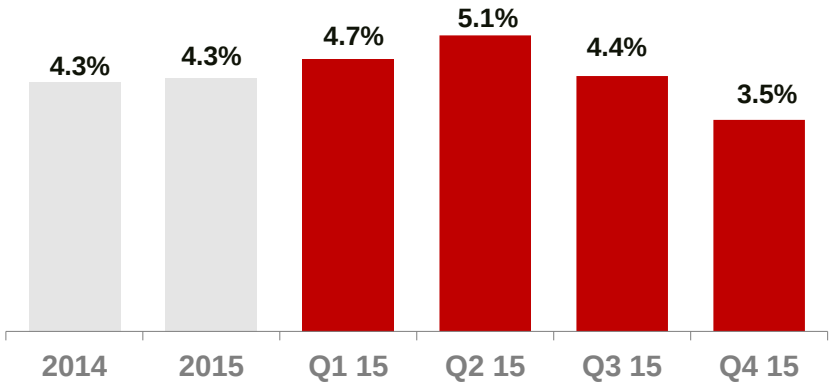
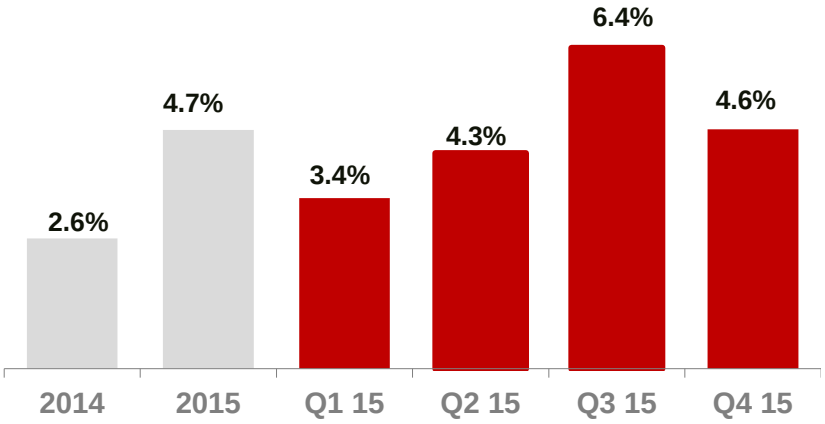
Operating Expenses as % of Net Revenue

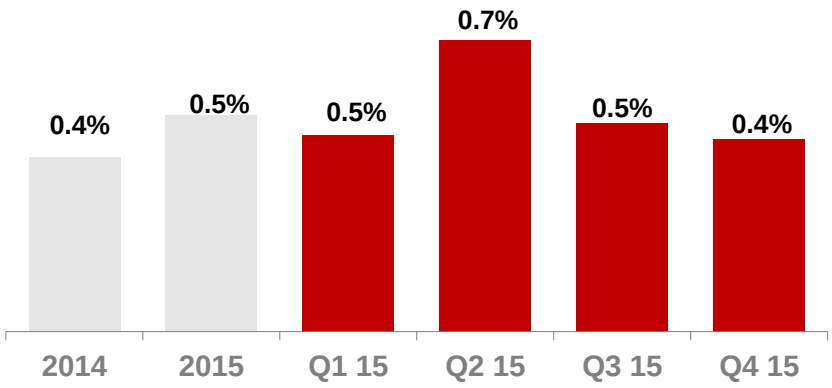
Selling expenses



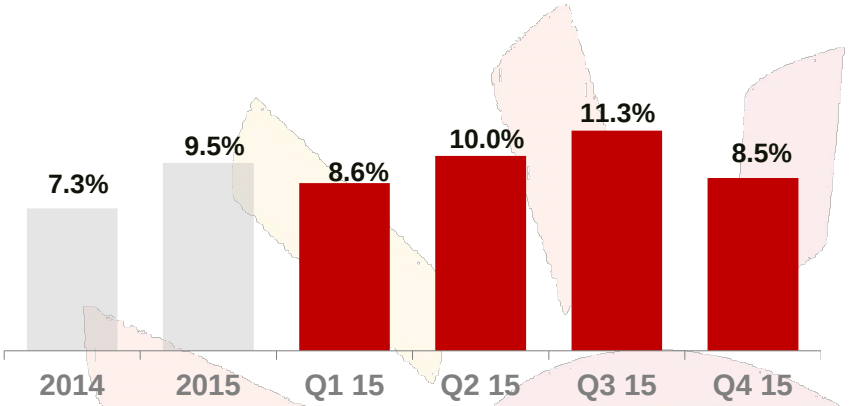
General & administrative expenses



Research & development expenses



Total operating expenses



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

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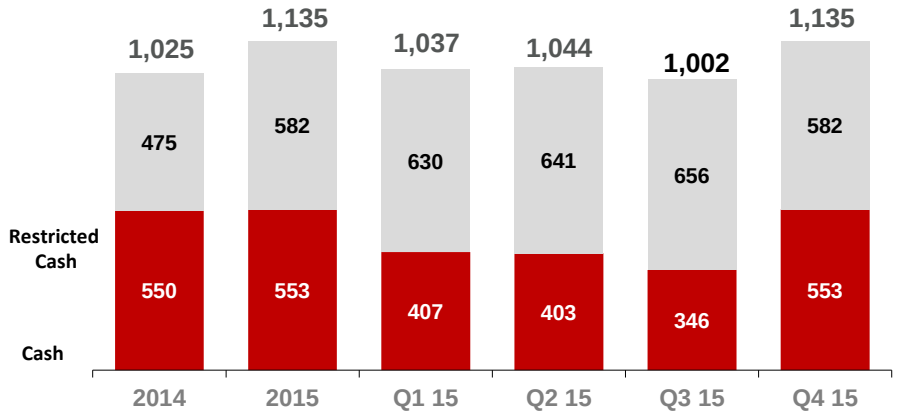
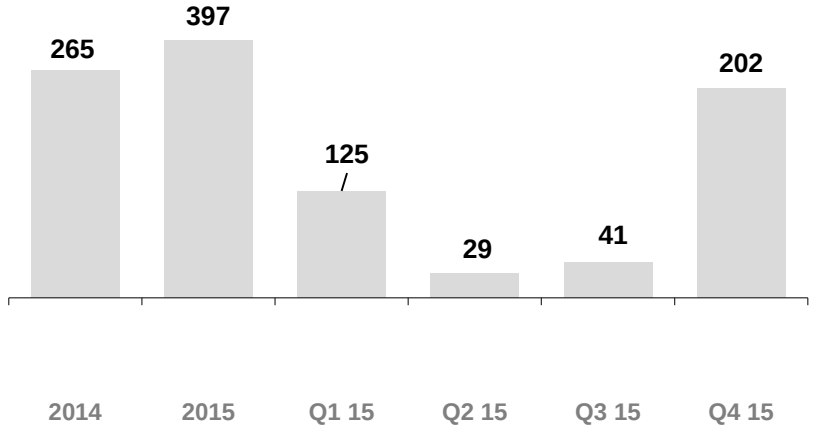
Selected Balance Sheet & Cash Flow Items

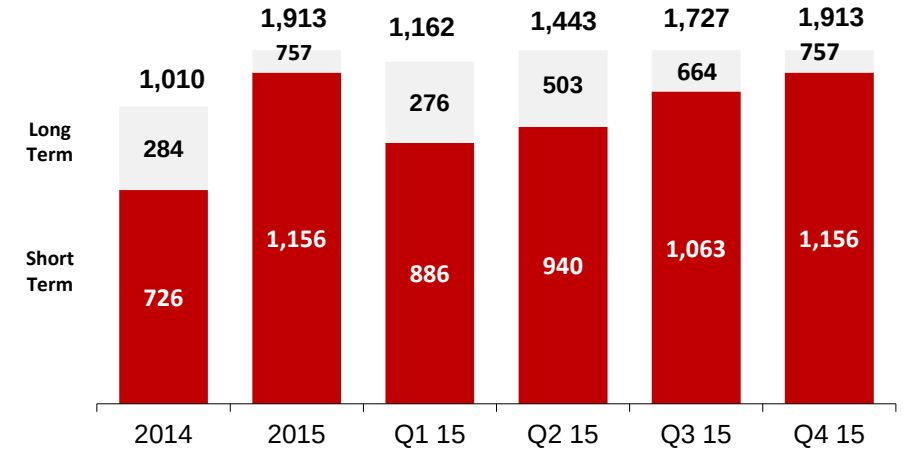
Cash & cash equivalents – US$ million



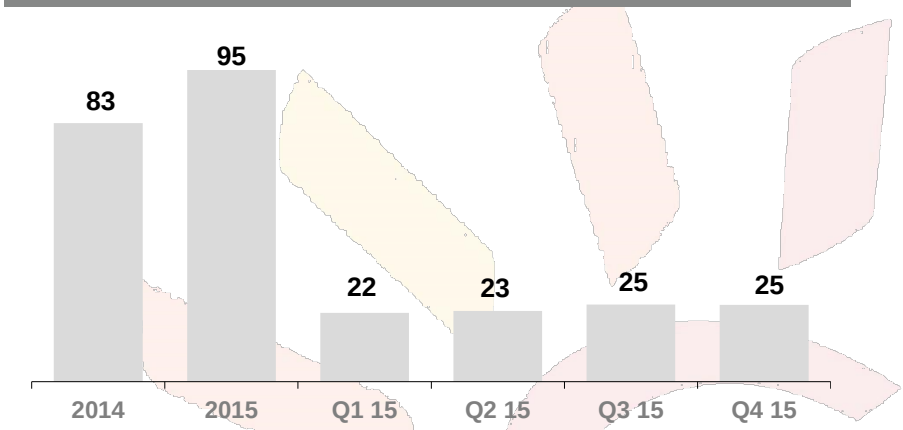
Cash flow from operations – US$ million(1)



Total debt – US$ million



Depreciation & amortization – US$ million



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

CanadianSolar
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Guidance as of March 10, 2016

	Q4 2015	Q1 2016	FY2015	FY2016	YoY Δ%
Module shipments	1,430 MW	1,085 MW – 1,135 MW	4.7GW	5.4 GW – 5.5 GW	+14.9%
Revenue	$ 1,120 m	$ 645 m to $ 695 m	$3.47 bn	$2.9 bn to $3.1 bn	-16.4%
Gross margin	17.9%	12% – 14%(1)	NA	NA	NA

1-Includes module business and project business

Canadian Solar may consider selling some of its OECD plants, in which case revenue for the full year 2016 is expected to be in the range of $3.2 billion to $3.6 billion.

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THANK
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