CanadianSolar
Make The Difference

Investor Day Presentation

JW Marriott, Essex House, New York City

May 18, 2015

CSIQ
Nasdaq Listed

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Agenda Today

Strategy Overview	10:00 a.m. – 10:30 a.m.
Module Business	10:30 a.m. – 12:00 p.m.
Technology and Cost Roadmaps	
Sales and Marketing	
Q & A	
Lunch Break	12:00 p.m. – 1:00 p.m.
Energy Business	1:00 p.m. – 2:00 p.m.
Global Project Segment	
U.S. Project Segment (Recurrent)	
YieldCo Opportunity and Guidance	2:00 p.m. – 2:30 p.m.
Q & A	
Closing Remarks	

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Agenda Today

- **Strategy Overview**
- Module Business
- Lunch Break
- Energy Business
- YieldCo Opportunity and Guidance
- Closing Remarks

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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
- > 10 GW of solar modules shipped cumulatively
- > 1.4GW solar power plants developed, built and connected (incl. Recurrent)
- Yield Co expected to be launched in the quarters ahead
- **Top 3 solar company by revenue and profits in 2014***

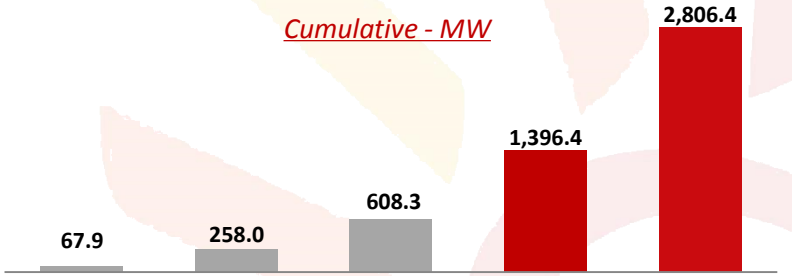
Global Footprint and Brand

● Sales office ● Manufacturing facility ■ Total Solutions contracted / late stage projects

Highlights

- 2014 Revenue: **$3.0 Billion**
- 2014 Shipments: **3.1 GW**
- 2014 Net Income: **$240 Million**
- 2015 Shipment Guidance: **4.0 – 4.3 GW**

Solar Power Plants Built and Connected



	2011-12	2013	2014	2015E	2016E
Annual Total	**67.9**	**190.1**	**350.3**	**788.1**	**1,410**

*Source: Factset, company analysis

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Presenters Today

	Name / Title	Work Experience
	**Dr. Shawn Qu** *Chairman, President & CEO (Director)*	■ Director & VP at Photowatt International S.A. ■ Research scientist at 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 STATS ChipPAC
	**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.
	**Guoqiang Xing** *VP Technology*	■ Chief Technology Officer at Hareon Solar Technology Co. Ltd ■ Research & Development Senior Director at JA Solar
	**Colin Parkin** *VP Global Energy Business and GM Canada*	■ Automation Tooling Systems (ATS) ■ Founder and President, Integrated Manufacturing Technologies
	**Josh Goldstein (Recurrent Energy)** *SVP Finance and Capital Markets*	■ Director and VP of Project Finance at Recurrent Energy ■ Public power banker at Morgan Stanley ■ Board Member, DeRose & Appelbaum, Bay Area provider of real estate services
	**Ed Job** *Director of Investor Relations*	■ IR Consultant ■ Principal in the Strategy Practice at DiamondCluster International, now PwC ■ Senior Manager in the Strategy Consulting division at Arthur D. Little

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A Look Back at Our Key Accomplishments

- We grew our PV module shipments at over 63% per year while broadly expanding our geographic footprint, and reducing dependence on European markets
- We leveraged our global brand, quality and effective sales force to consistently expand our market share
- We differentiated our business model by successfully growing our downstream, total solutions business
- We ended 2014 among the top-3 solar U.S.-listed solar energy companies by revenue and profitability, with one of the strongest balance sheets
- We built an industry leading project development platform that positions us to launch our own YieldCo

Since our IPO we have emerged as a strong global leader of the solar revolution.

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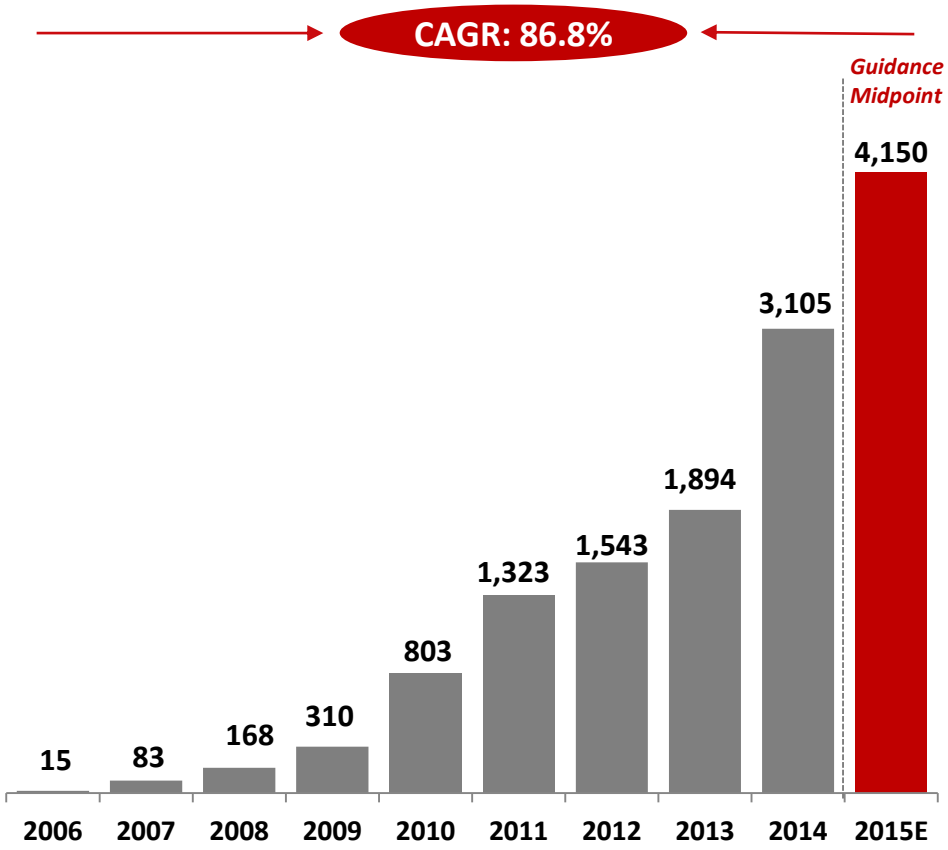
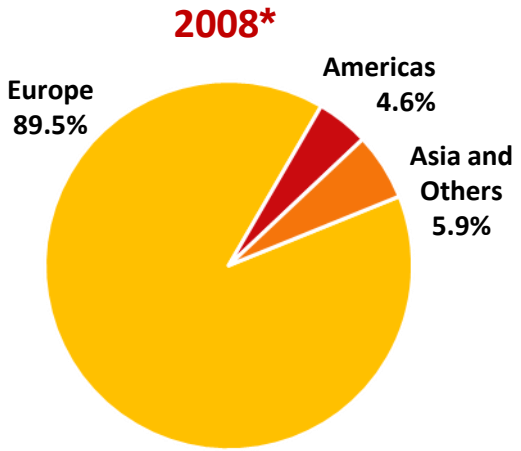
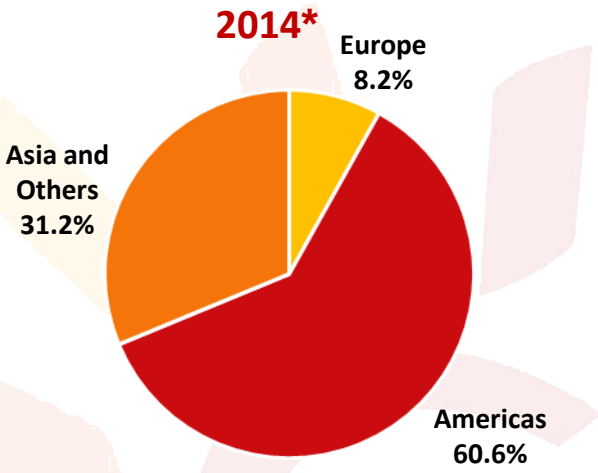
We Grew Shipments and Broadened Our Geographic Footprint…







* Based on net revenue

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We Consistently Expanded Our PV Module Market Share

	2009	2010	2011	2012	2013	2014	Q4 2014
1st	First Solar	Suntech	Suntech	Yingli	Yingli	Trina Solar	Trina Solar
2nd	Suntech	First Solar	First Solar	Suntech	Trina Solar	Yingli	Canadian Solar
3rd	Sharp	Sharp	Yingli	Trina Solar	Canadian Solar	Canadian Solar	JA Solar
4th	Yingli	Yingli	Trina Solar	Canadian Solar	Sharp	Jinko Solar	Yingli
5th	SunPower	Trina Solar	Canadian Solar	First Solar	Jinko Solar	JA Solar	Jinko Solar
6th	Kyocera	Canadian Solar	Sharp	*Sharp*	Renesola	Sharp	First Solar
7th	Trina Solar	Hanwha Solar	SunPower	JA Solar	First Solar	Renesola	Renesola
8th	Canadian Solar	Kyocera	Jinko Solar	Jinko Solar	Hanwha Solar	First Solar	Hanwha Solar
9th	Hanwha Solar	SunPower	Hanwha Solar	SunPower	Kyocera	Hanwha Solar	Sharp
10th	Solar World	Solar World	Kyocera	Hanwha Solar	JA Solar	Kyocera	Kyocera

Source: Company issued press releases, analyst reports, Canadian Solar analysis
Note: Based on Module MW shipment recognized under GAAP

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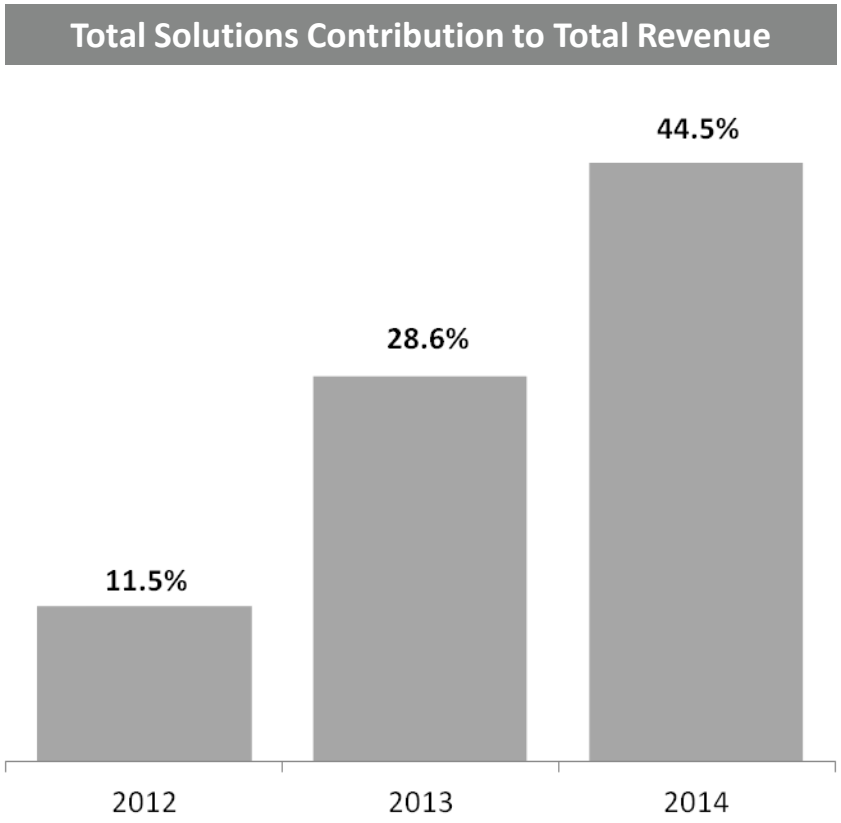
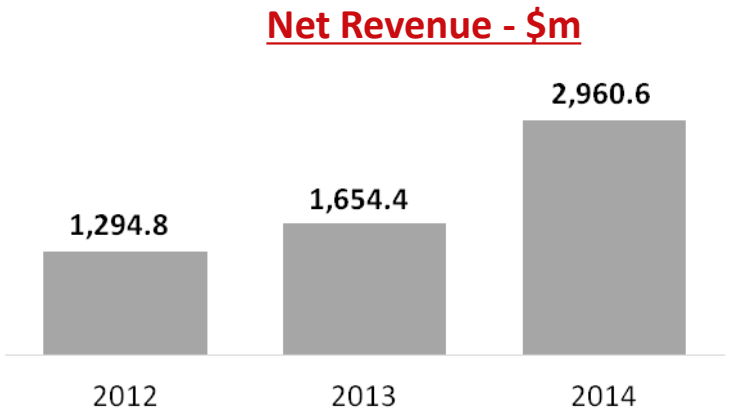
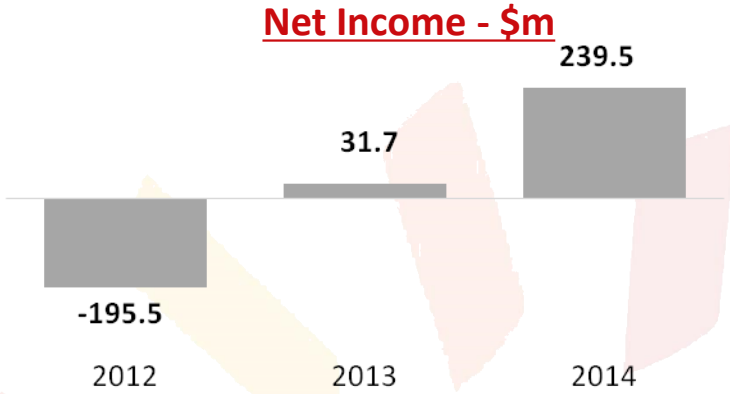
We Differentiated our Business Model by Moving Downstream







We ended 2014 among the top-3 US-listed solar energy companies by revenue and profitability, with one of the strongest balance sheets.

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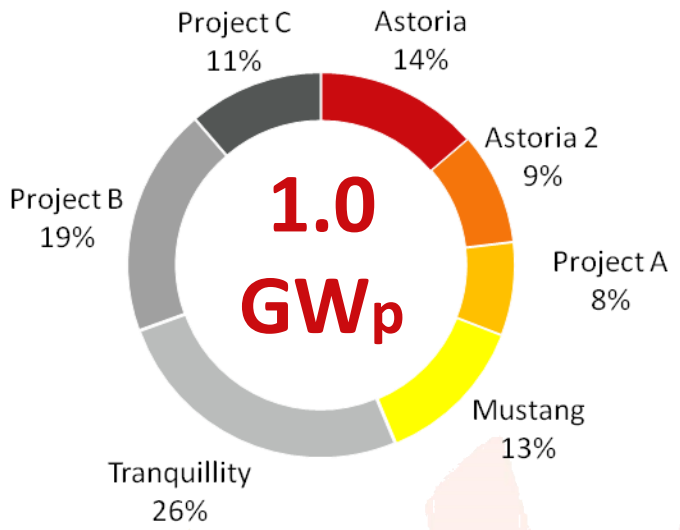
We Built a World Leading Platform to Support Our YieldCo Launch

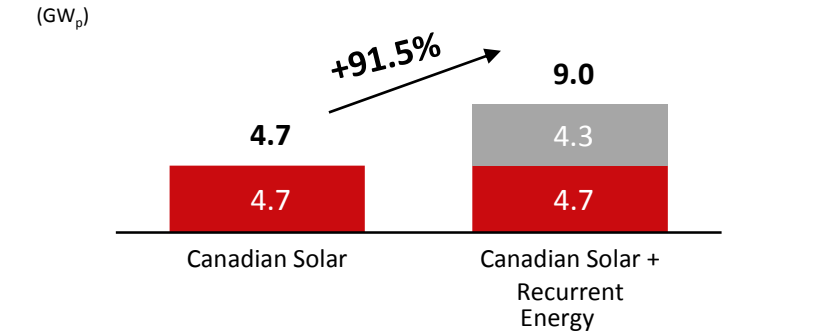
- Acquired Recurrent Energy for $265M, transaction closed March 30, 2015
- $2B to be invested to complete 1.0 GWDC prior to end of 2016
- Core asset base to support launch of CSIQ YieldCo.
- Approximately **2,000** American jobs to be created in the next two years

Late-stage U.S. Projects Breakdown

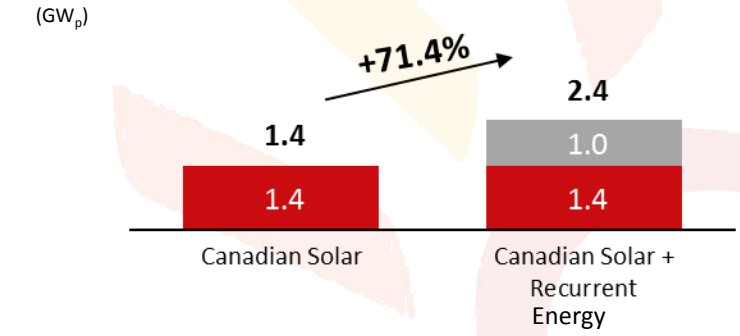
(% of portfolio by capacity)



Total project pipeline



Total late-stage pipeline



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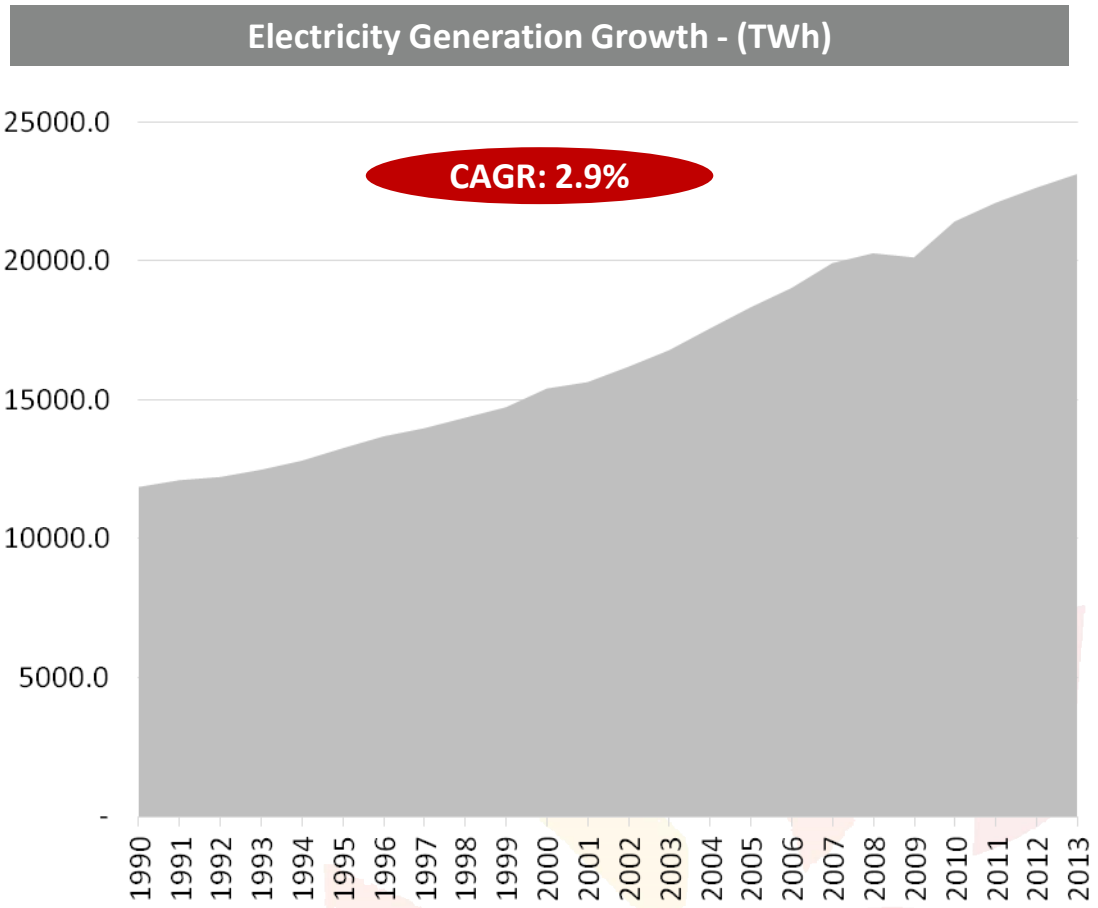
Macro-environment Driving Solar Adoption is Favorable

- Demand for electricity is not going out of fashion, with global demand growth expected to track GDP
- Renewable energy additions already surpasses conventional energy, and solar is expected to be the fastest growing source of electricity
- Global annual PV installation to break through 50GW in 2015, and near term demand is forecast to be healthy
- We believe we are at the very early stages of solar adoption, and see significant upside in demand for solar PV over the next 15 years

Demand for Electricity is not going out of Fashion

- Electricity consumption is expected to grow in line with GDP
- 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 adoption prevail



Source: BP 2014 Statistical Review of World Energy

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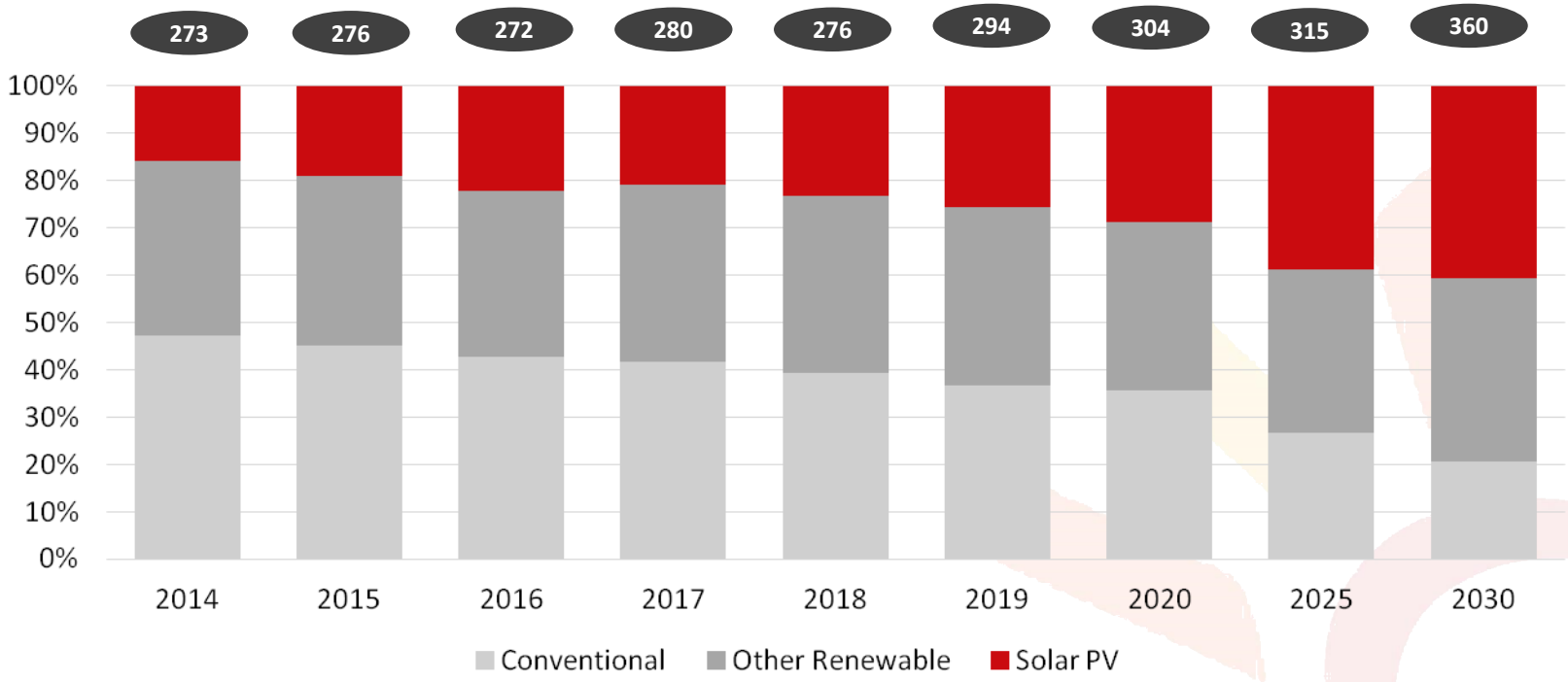
Renewable Energy Additions Already Surpasses Conventional Energy

- In 2014, solar PV and other renewable energy capacity additions surpassed conventional energy for the first time, and solar PV is expected to dominate.
- Over the next 20 years the solar industry is expected to generate over $5 trillion of cumulative revenue.

Global Capacity Additions - GW



Source: Bloomberg New Energy Finance, Deutsche Bank

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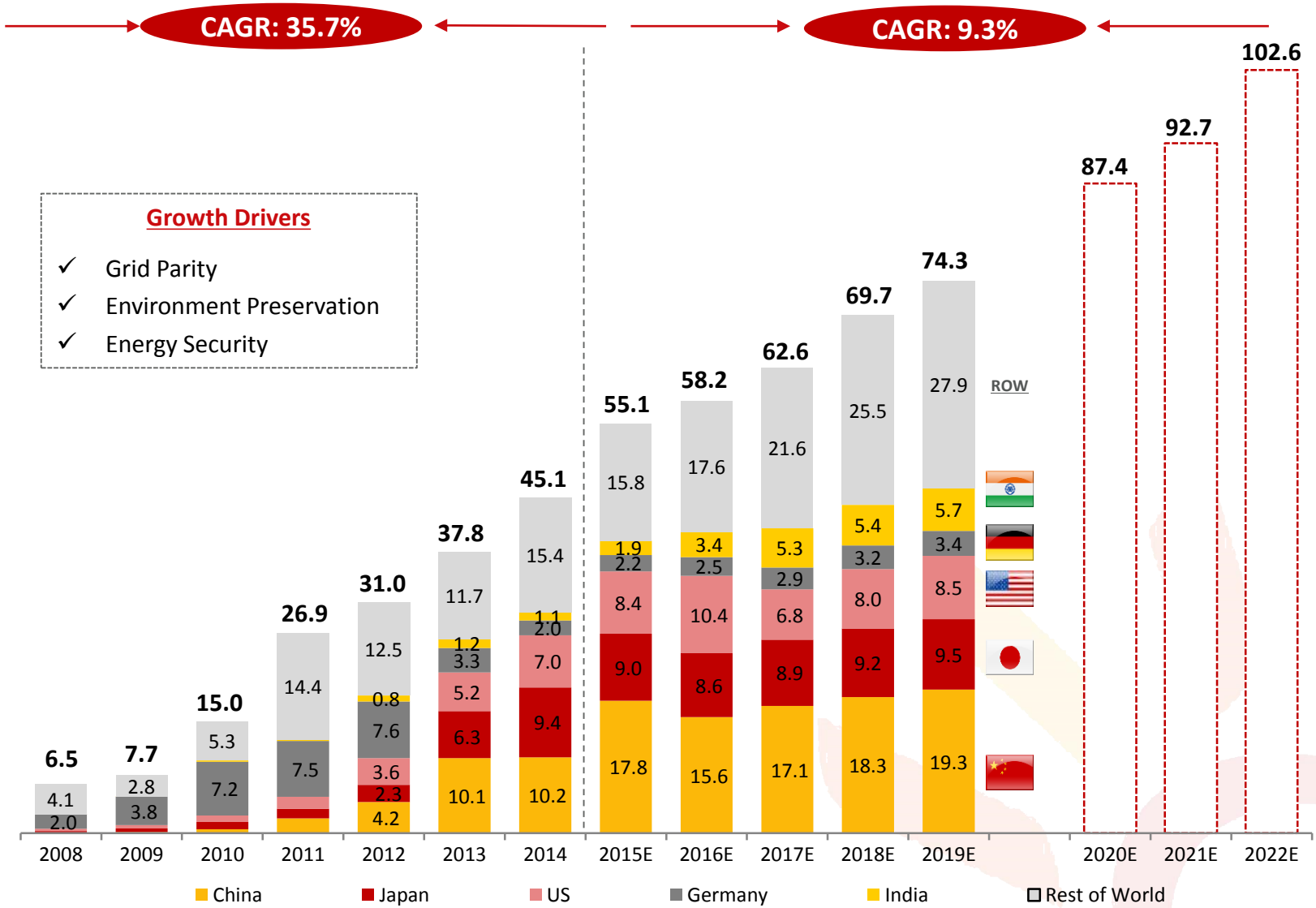
Global Annual PV Installation to Break through 50GW in 2015



Source: Global PV module demand assumptions from Solarbuzz, IHS, Bloomberg New Energy Finance.
Note: (1) China portion of 2014 and 2015 demand based on National Energy Administration guidelines

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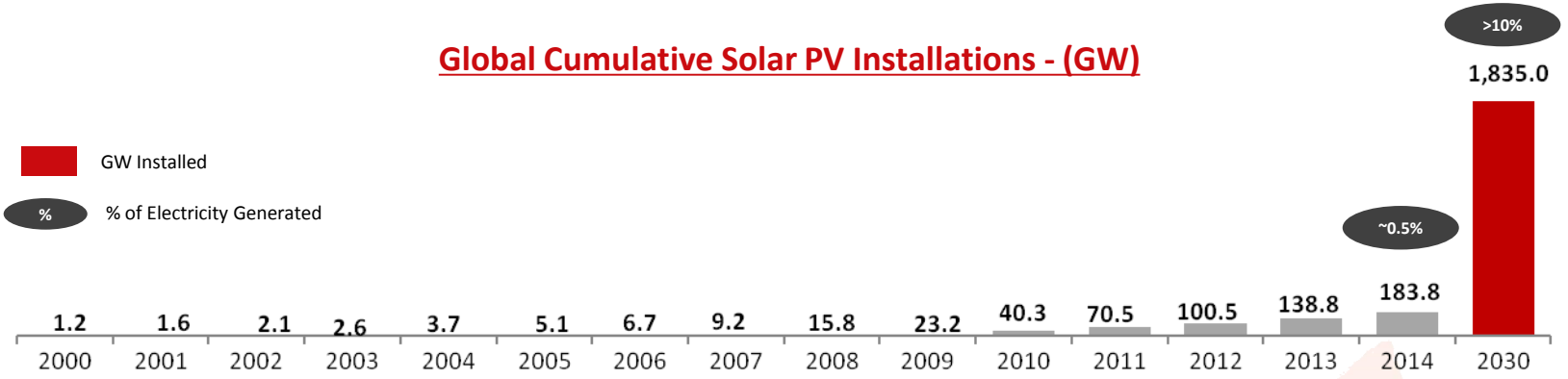
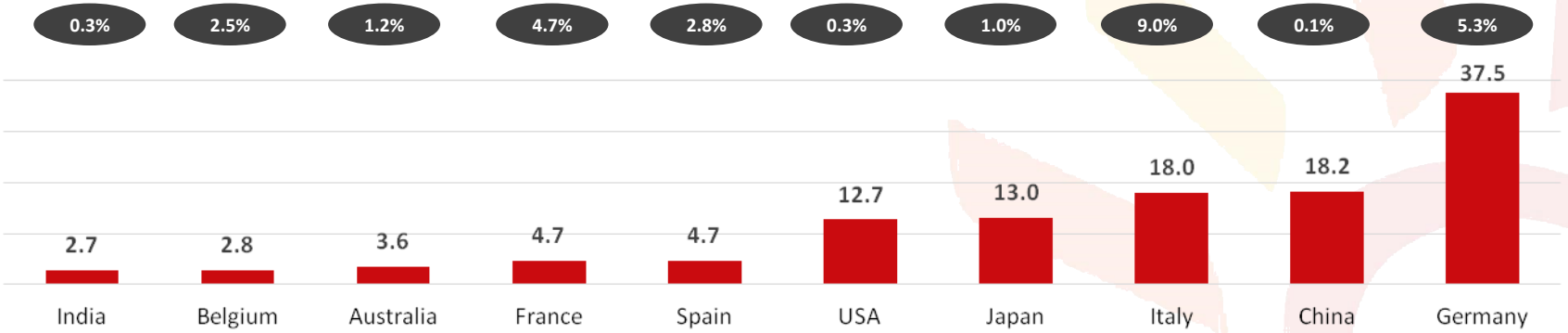
We Are at the Very Early Stages of Solar Adoption

- Solar energy will grow from less than 1% of global electricity generation today to >10% by 2030.
- In Italy today, solar generates 9% of total electricity, compared to just 0.1% in China

Global Cumulative Solar PV Installations - (GW)



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



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

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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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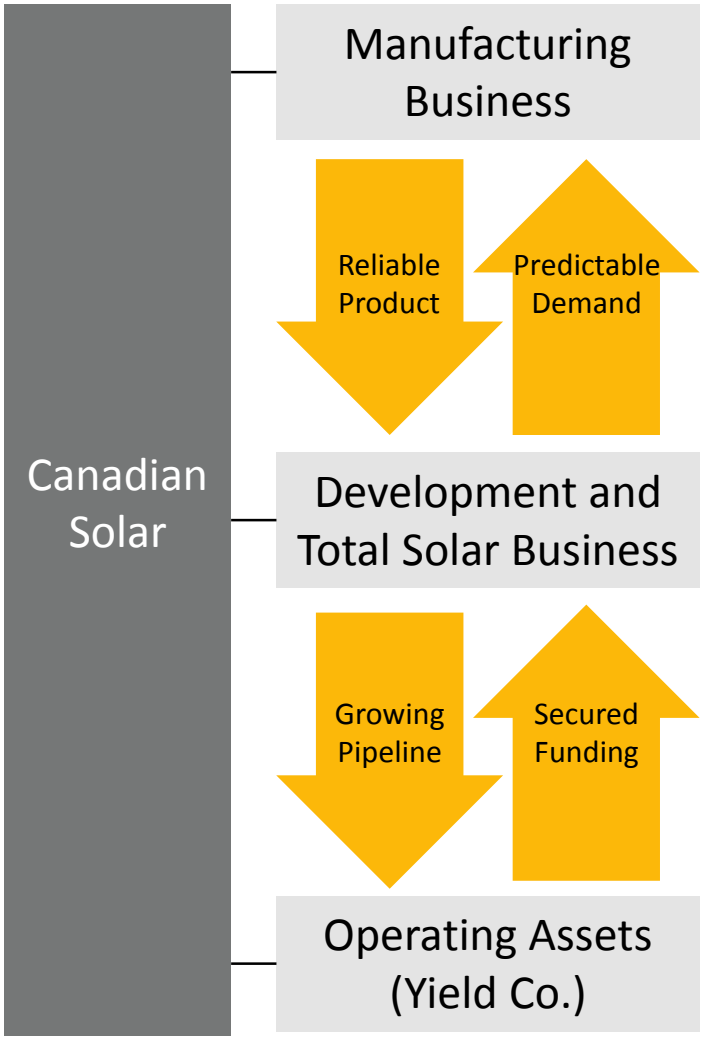
Strategic Positioning

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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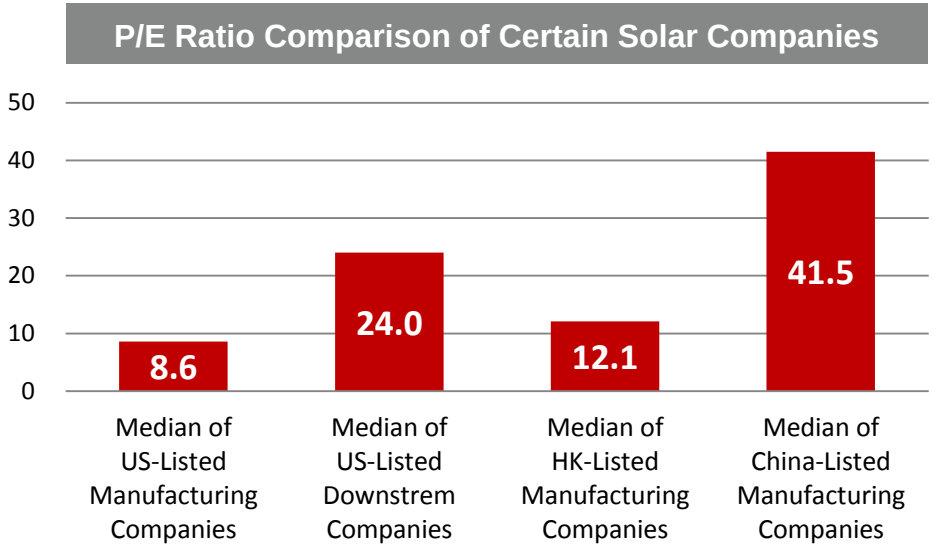
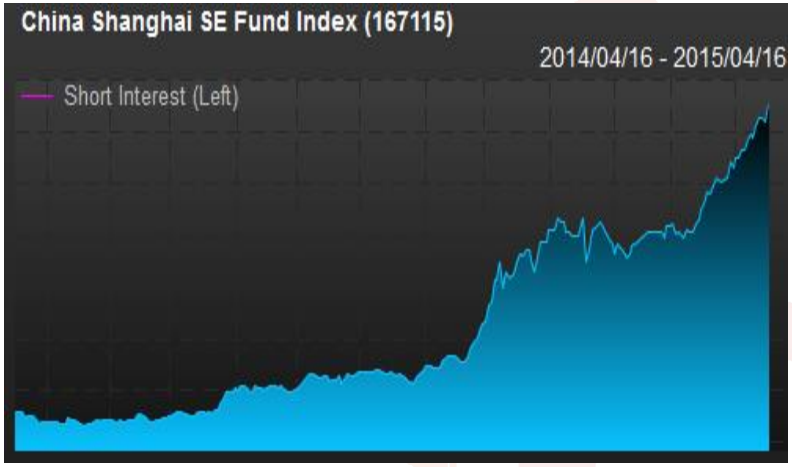
Value Discovery in the Solar Sector

- Value disparity between North American and Asian stock markets out of normal range



Source: Deutsche Bank, March 23, 2015



Source: Factset April 17, 2015

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Agenda Today

- Strategy Overview
- **Module Business**
  - **Technology and Cost Roadmaps**
  - Sales and Marketing
  - Q & A
- Lunch Break
- Energy Business
- YieldCo Opportunity and Guidance
- Closing Remarks

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The PV Learning Curve and Cost Reduction Backdrop

- Historically, module price decreases by 21.5% for every doubling in cumulative module shipment
- Cell efficiency/module power improvement and manufacturing efficiency are critical to support future cost reduction
- At Canadian Solar, we have been able to increase cell efficiency at 0.5% absolute per year over the past 5 years through internal efforts, in line with industry learning curve
- Module power output for our mainstream product (CSP6), has increased by an average of 6.8W per year in the past 5 years

Canadian Solar R&D has a track record of success scaling innovative technologies that deliver cost competitive solar energy solutions

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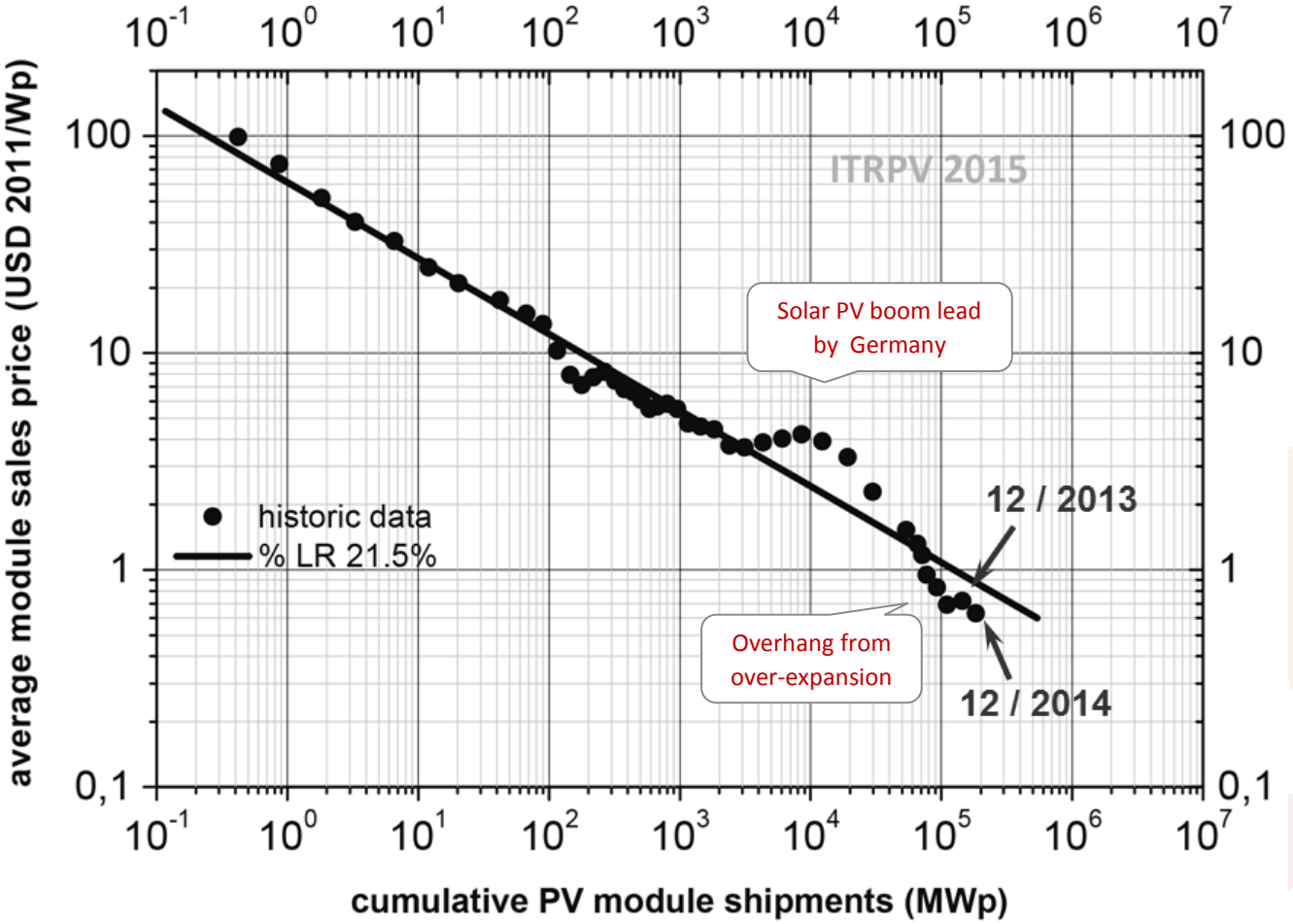
PV Learning Curve: Moore's Law in Photovoltaics

- Module price has decreased by 21.5% for every doubling in cumulative module shipment



Note: measurement starts circa 1960's and goes until Q1 2015 when cumulative modules shipments are estimated by ITRPV to be 184GW

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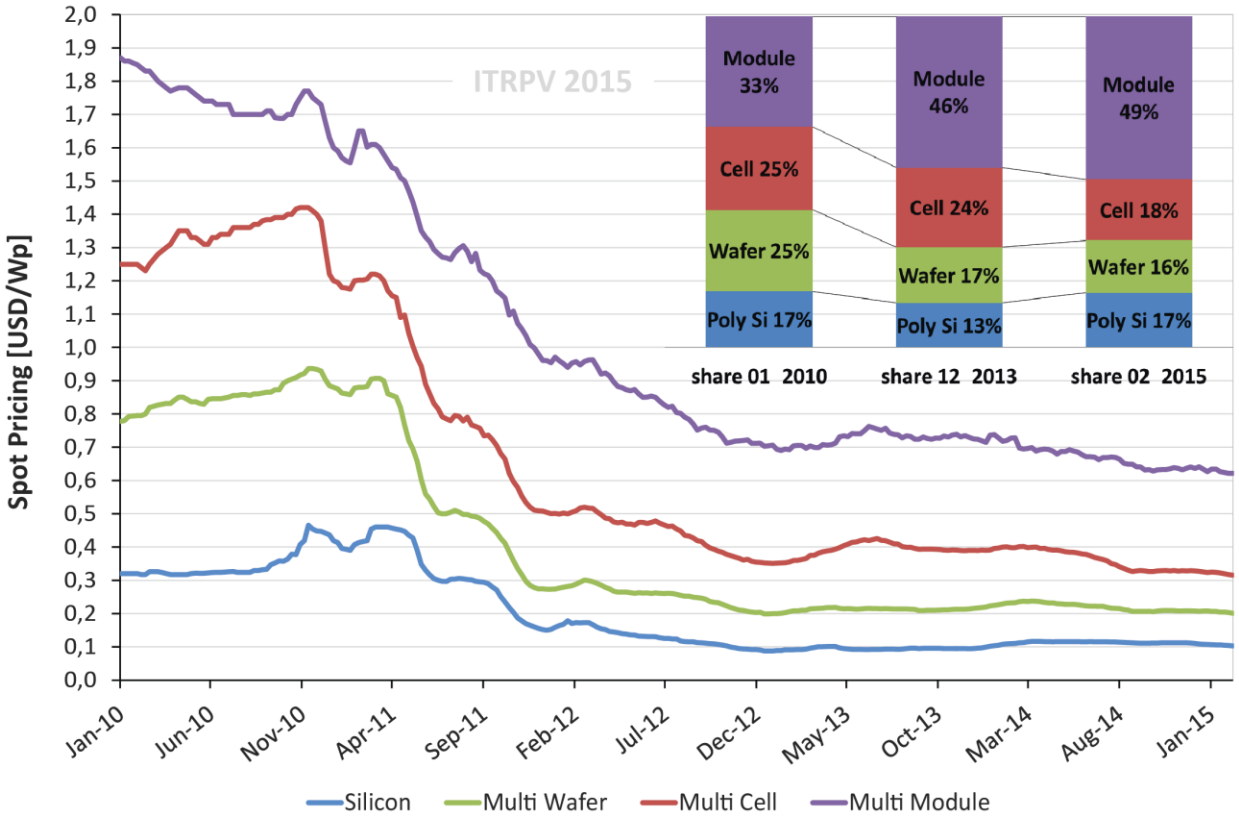
Module Price and Cost Reduction is Slowing Down

- Since 2012 module price and cost reduction is back to the learning curve norm
- Module power/cell efficiency improvement and manufacturing efficiency are critical to support future cost reduction



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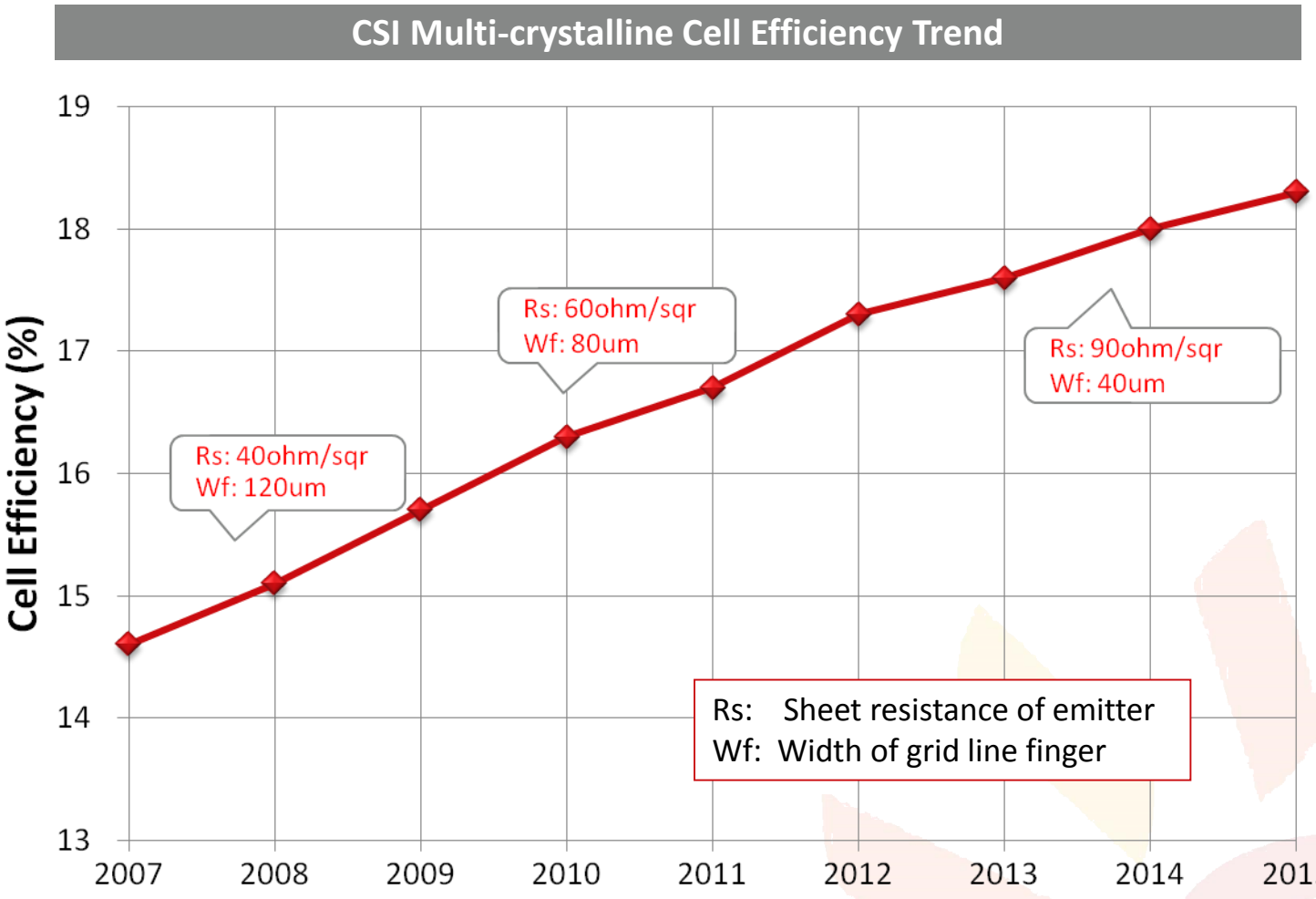
Canadian Solar Multi Cell Efficiency Progress



- Cell efficiency improved at a rate of 0.5% (absolute) each year

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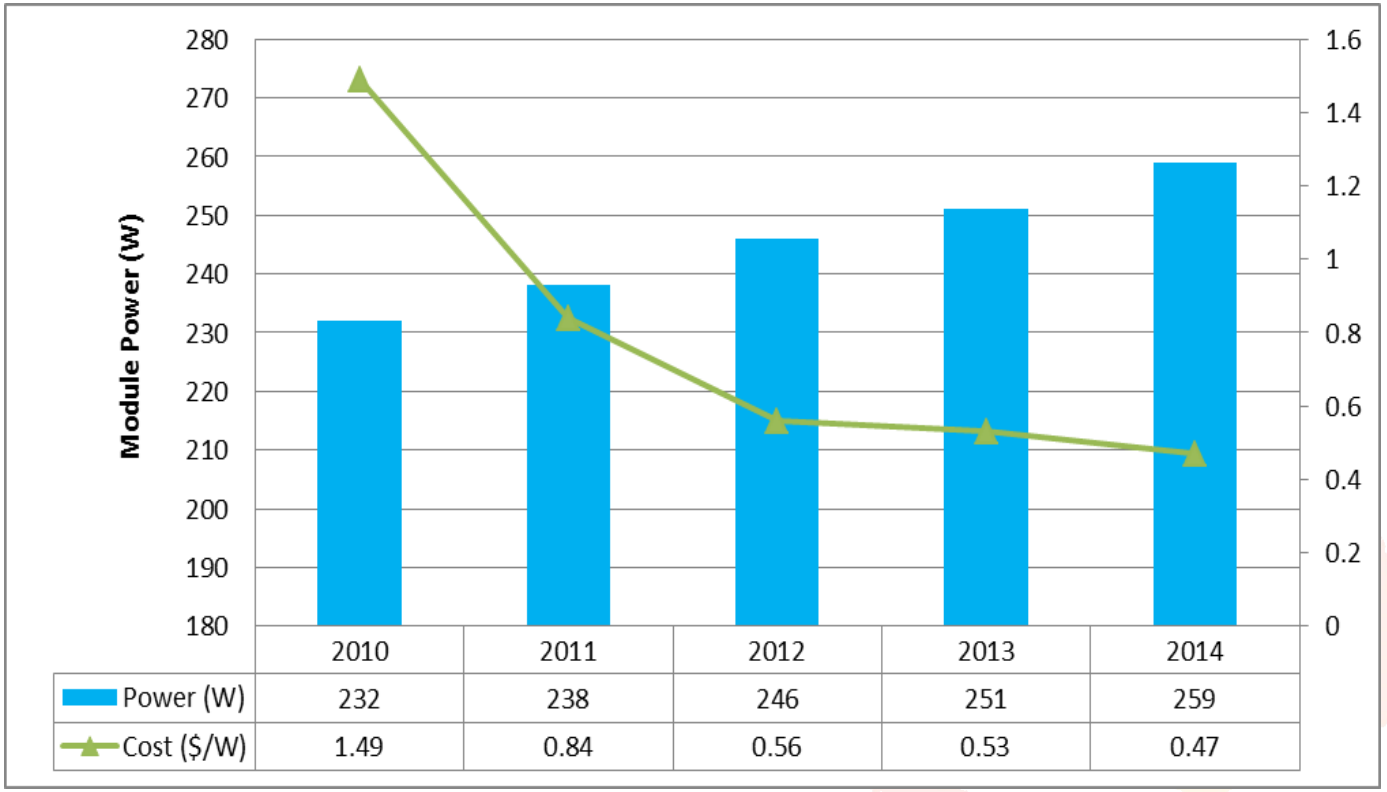
Canadian Solar Module Power Output and Cost Trend

CS6P-P (60 cells) Power and Cost Trend

Mainstream CS6P-P module , each year's Q4 data



	2010	2011	2012	2013	2014
Power (W)	232	238	246	251	259
Cost ($/W)	1.49	0.84	0.56	0.53	0.47

- Annual power increase averaged 6.8W per year in the past 5 years
- In-house module cost decreased steadily

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Strong R&D Capabilities and Portfolio of Technologies

- Dedicated research labs for cells and modules
- PV Reliability Test and Analyses Lab is accredited as test witness lab for TUV Rheinland, CSA and VDE
- Recently launched competitive high-efficiency cell technology: ONYX
- Portfolio of high efficiency technologies such as n-type technology, being evaluated for potential future launch with efficiency targeted to exceed 22% by 2017

R&D Mission:

- To make company's solar products more *powerful, reliable, affordable and easy-to-use*.

R&D Objective:

- *To develop and improve ready-for-production technologies* in wafers, cells and modules to increase product efficiency while reducing cost; and continuously enhance technical strength in PV systems and energy solutions.

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Research & Development Capabilities

Areas of Focus	Description
Solar Cell Research and Development	✓ Develop high efficiency and cost competitive new cell technologies ✓ Owns one dedicated research production line for cell R&D
Solar Module Research and Development	✓ Focused on the innovation of solar modules ✓ Owns one dedicated research production line for module R&D
PV Product and System Technology Development	✓ Develop high quality and low cost off-grid products: hybrid system, energy storage, solar pump, and PV+ diesel ✓ System technology development
Photovoltaic Reliability Testing and Analysis	✓ Fully compliant with ISO/IEC 17025, IEC 61215/61730 /61701/62804, UL1703/1741 standards ✓ Test witness lab: TUV Rheinland, CSA and VDE certification bodies

First PV manufacturer to obtain auto industry's stringent ISO TS16949 accreditation for product quality control





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Solar Cell: ONYX I (Black Silicon)

- 0.4% cell efficiency and 4 watts module power gain over baseline by 2015 Q4
- Production roll out begun in 2015 Q1
- Ramp up as future multi baseline
- Increase market competitiveness
- Pleasing aesthetics

	Voc(mV)	Isc(A)	FF(%)	Efficiency
Baseline	632.2	8.707	79.46	18.00%
ONYX I	633.1	8.812	79.88	18.31%

Over 3 years in-house R&D, **self-owned IPs**

World 1st and the only one in mass production with similar technologies

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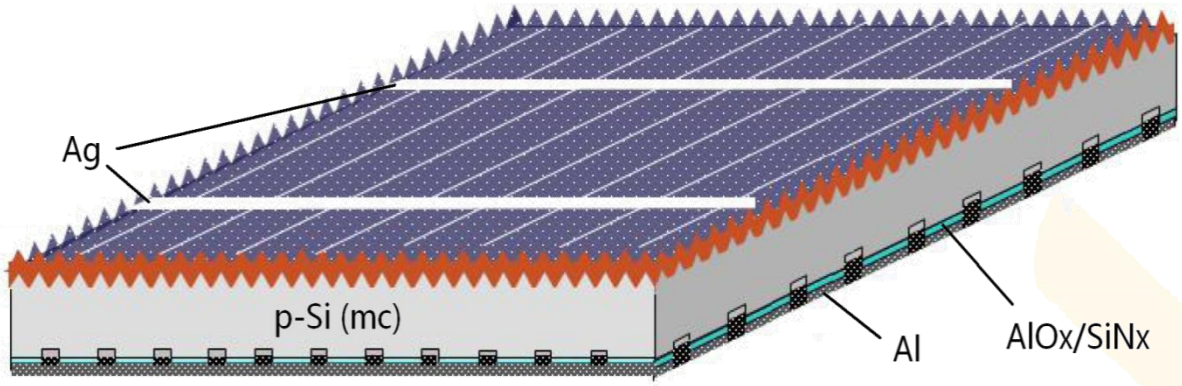
Solar Cell: ONYX II

- ONYX II enhances back side passivation and increases cell efficiency to 19%
- Low Light Induced Degradation (LID), and Potential Induced Degradation (PID) resistant
- 0.5% cell efficiency and 5 watts module power gain over ONYX I by 2015 Q3
- Production roll out begin in 2015 Q3, will gradually ramp up to 400MW



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Solar Cell: Next Generation (n-type bifacial)

- LID Free & PID Free
- Excellent Temperature Coefficient: (-0.22/ ˚C vs. -0.47/ ˚C conventional)
- Bifacial module: higher front side efficiency plus back side contribution, expected to lower LCOE by 16%
- Targeting production cell efficiency at 22.0% and module power output at 310W (CS6P type, single side)
- Trial production expected in 2016

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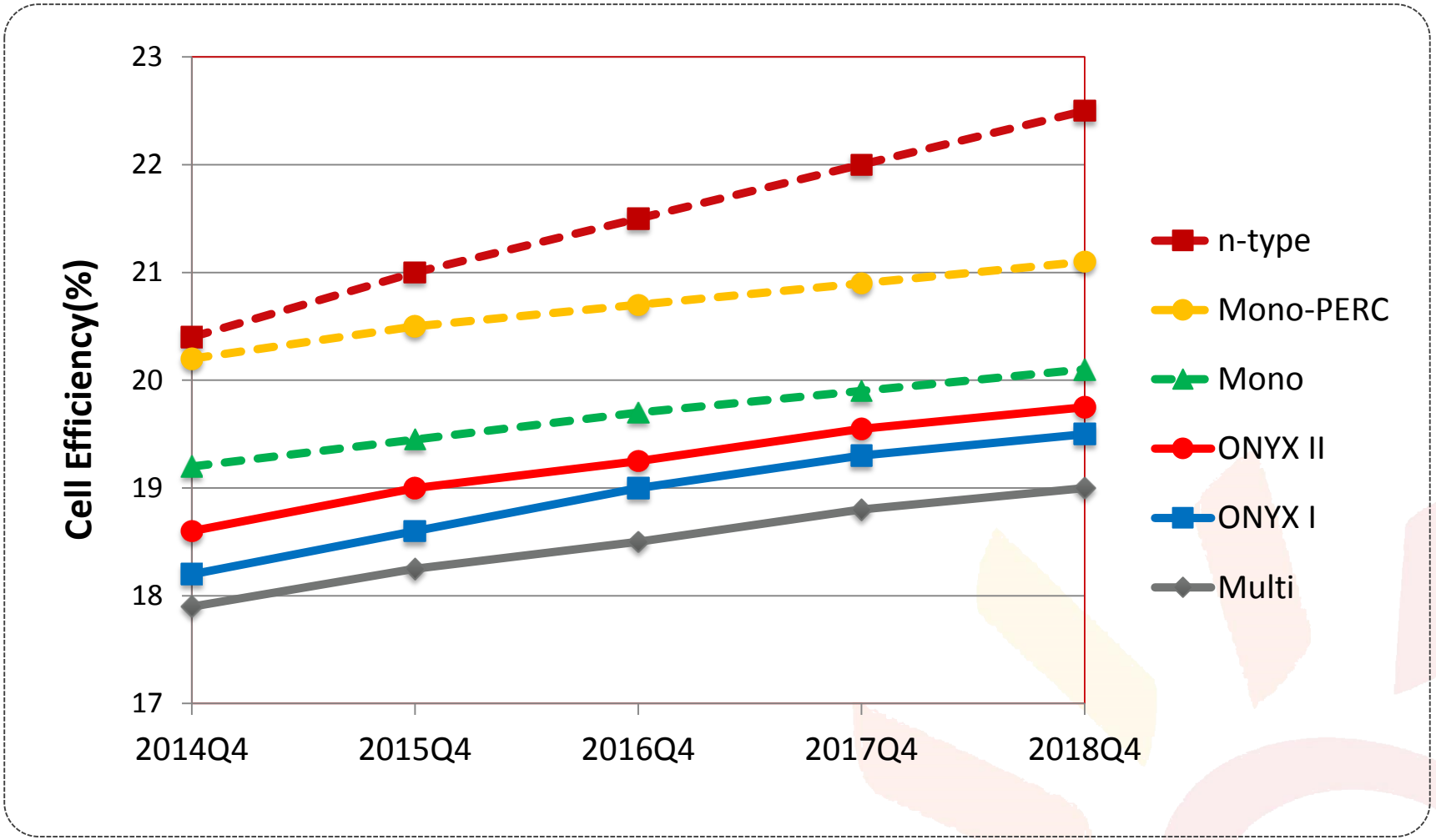
Cell Efficiency Roadmap



World Class Solar Module Portfolio

- We have a broad portfolio of modules addressing all segments of the market, residential, commercial and utility-scale
- Our modules have the highest PVUSA Testing Conditions (PTC) rating among our peers
- We have developed innovative cell and module designs to meet the ever growing needs of our customers
  - Double glass modules with up to 30 year warranty
  - First to launch a mass produced module with 4-busbar cells
- 100% of our in-house produced cells are PID resistant

CS6V

Mono Poly

50 cells:
for residential applications

DIAMOND
CS6K-P-PG

Poly

60 cells:
Double glass modules

CS6K

Mono

ALL-BLACK
Mono

ONYX
Poly

60 cells:
standard modules, for residential and commercial applications

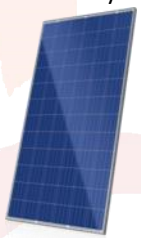
CS6P

Poly

60 cells:
standard modules

CS6X

Poly



72 cells:
for utility applications

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Canadian Solar Modules Rank Highest on PTC Rating

STC Rating (Standard Test Condition)	PTC Rating (PVUSA Test Condition)
Module performance is rated at **25℃** cell temperature – Name plate power	**Required by the California Energy Commission,** a more realistic measure of module performance around module's nominal operating cell temperature (NOCT), which is about **45 ℃**

Higher PTC Rating means module with the same name plate power being able to generate more power at realistic operation conditions

Canadian Solar modules ranked highest PTC Rating among all the P-type modules independently tested to meet the California Energy Commission requirements

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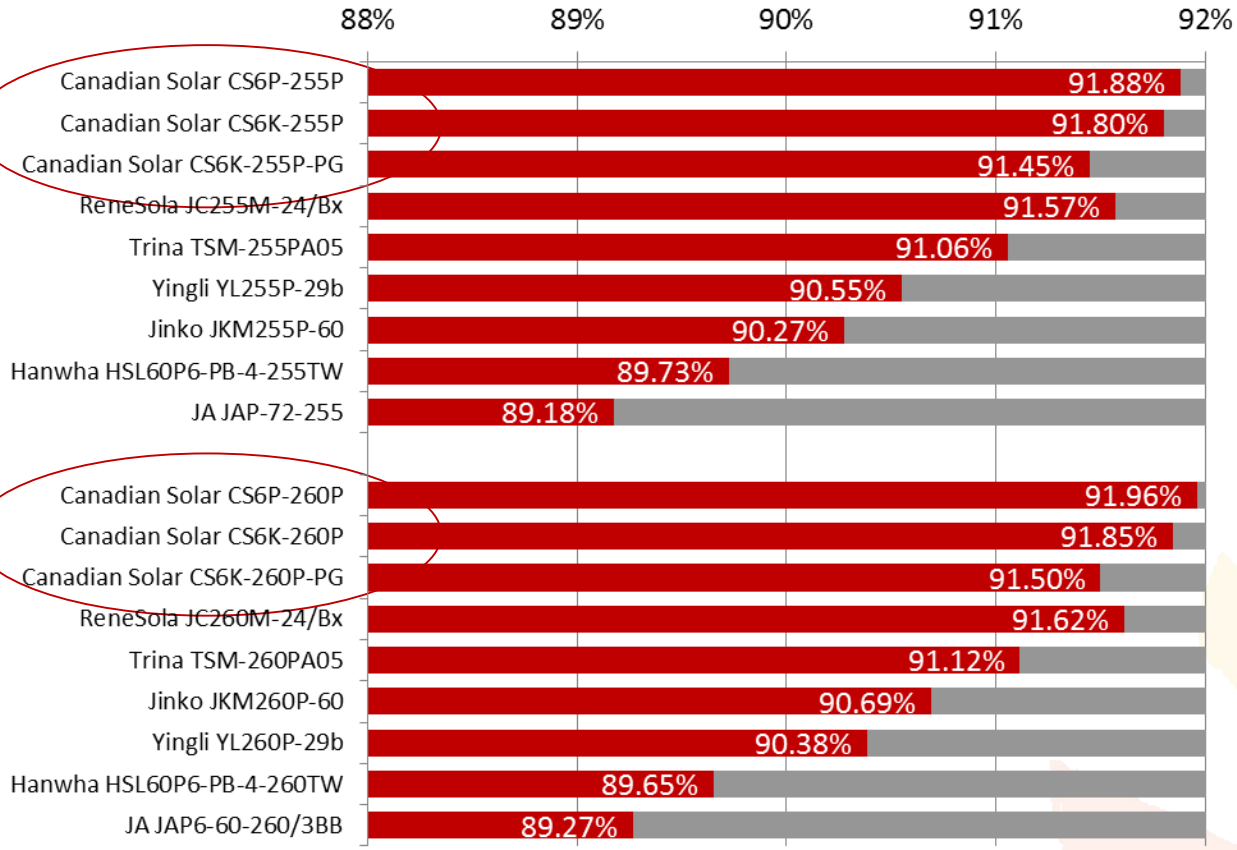
California Solar Initiative Module PTC Rating (CS6P-P, 60 Cells)

PTC Rating for Poly Modules



PTC Watt	STC Watt
234.3	255
234.1	255
233.2	255
233.5	255
232.2	255
230.9	255
230.2	255
228.8	255
227.4	255
239.1	260
238.8	260
237.9	260
238.2	260
236.9	260
235.8	260
235.0	260
233.1	260
232.1	260

Source: http://www.gosolarcalifornia.ca.gov/equipment/pv_modules.php

Updated as of April 1, 2015

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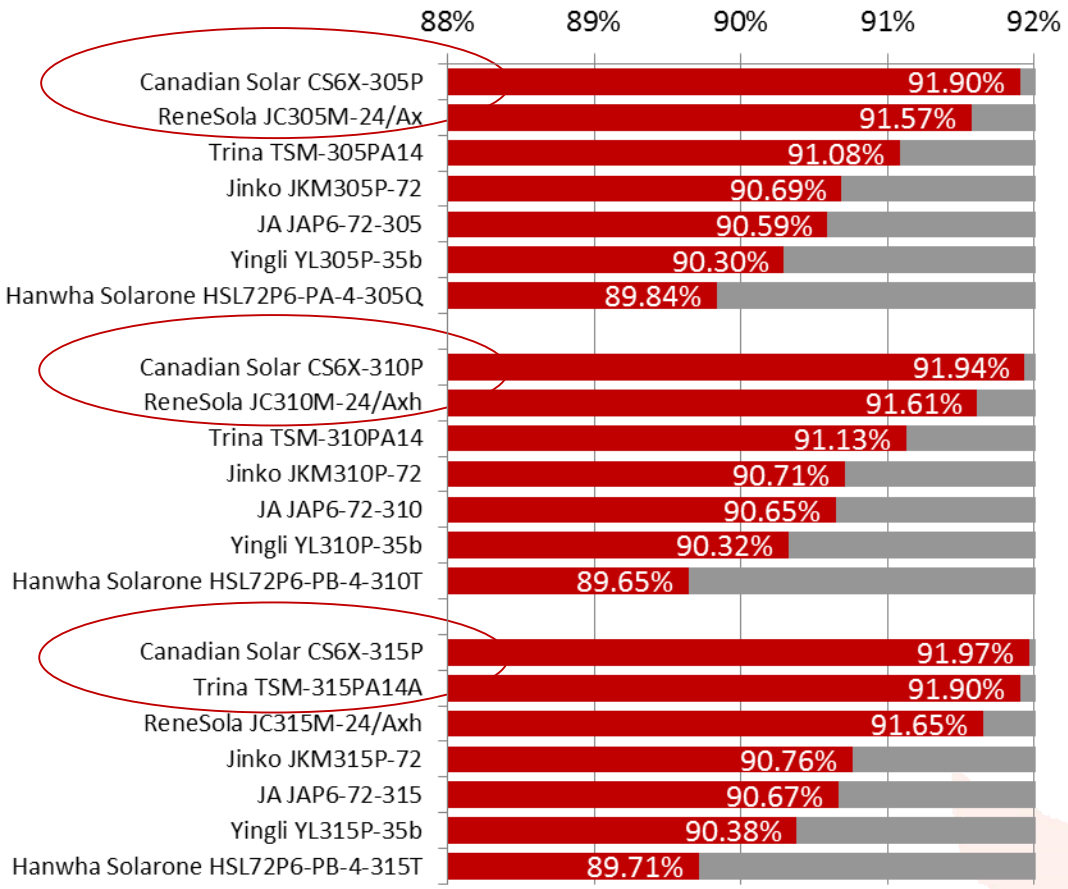
California Solar Initiative Module PTC Rating (CS6X-P, 72 Cells)

PTC Rating for Poly Modules



PTC Watt	STC Watt
280.3	305
279.3	305
277.8	305
276.6	305
276.3	305
275.4	305
274.0	305
285.0	310
284.0	310
282.5	310
281.2	310
281.0	310
280.0	310
277.9	310
289.7	315
289.5	315
288.7	315
285.9	315
285.6	315
284.7	315
282.6	315

Source: http://www.gosolarcalifornia.ca.gov/equipment/pv_modules.php

Updated as of April 1, 2015

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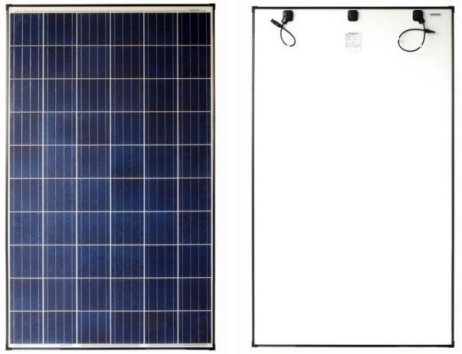
Premium Solar Modules

Diamond Modules:

- Heat strengthened glass as backsheet, robust for sea/waterside/desert applications
- Ready for 1500V systems, saving BOS cost
- 30 year power performance warranty



Quartech Modules:

- Four-busbar cell technology improving module reliability and conversion efficiency
- 1st to launch volume production

PID Resistant Modules:

- Self-made cells are 100% PID resistant by the end of 2014
- Passed qualification test by 3rd parties (VDE, TUV SUD, Franuhofer ISE , PI Berlin, PVEL)

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Module Power Output Forecast

		2014Q4		2015Q4		2016Q4		2017Q4		2018Q4	
		Eff	Power	Eff	Power	Eff	Power	Eff	Power	Eff	Power
Research Cell & Module	Multi	18.5%	270	19.0%	280	19.5%	288	20.0%	295	20.5%	300
	Mono	20.5%	280	21.0%	290	22.0%	300	23.0%	320	24.0%	340
Volume Manufacturing											
Manufacturing Entitlement	Multi	17.9%	260	18.2%	266	18.6%	272	18.8%	275	19.0%	279
	ONYX I	18.1%	263	18.5%	269	18.8%	274	19.3%	281	19.5%	284
	ONYX II	19.0%	273	19.3%	277	19.6%	282	20.0%	285	20.3%	290
	Mono	19.2%	270	19.5%	275	19.8%	282	20.1%	285	20.4%	290
	Mono PERC	20.2%	283	20.5%	289	20.7%	294	20.9%	298	21.0%	300
	N-type					21.5%	304	22.0%	312	22.5%	320

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Centre for PV Product and System Technology Development

Objective: to continuously enhance technical strength in PV systems and energy solutions

PV Component

MLPE

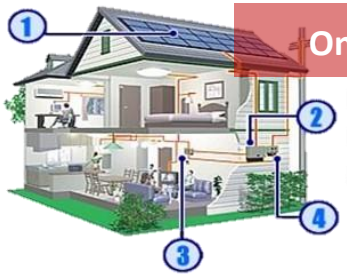
Inverters

O&M components

Smart Energy

Off grid

On grid



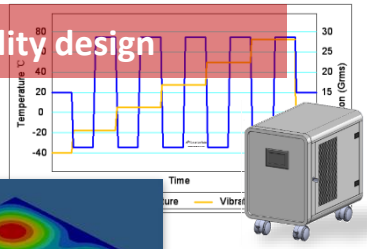
Home Energy Management System

Micro grid

Energy Management System

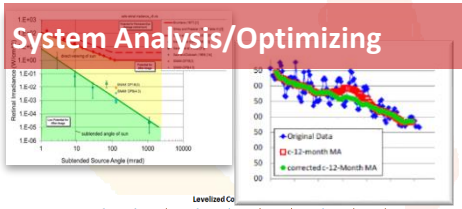
System Engineering

Reliability design

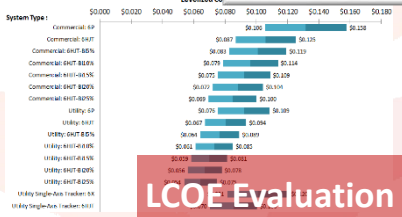


Racking to Module Analysis

System Analysis/Optimizing



LCOE Evaluation



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Manufacturing Capacity and Cost Roadmap

- CSI is a global leader in the manufacturing of PV products, with 3.8GW of module capacity, with industry leading cost, technology and product quality
- Our new cell plant in Funing is equipped to produce Onyx I and II solar cells, with cell conversion efficiency expected to reach 19% by the end of 2015, and 20% by 2017
- We will continue to prudently expand our production capacity to increase our market share to maintain our position as a Tier 1 supplier of solar PV products
- We will also continue to implement cost reduction measures to maintain our competitive edge

Canadian Solar has steadily improved to the top-3 position in market share with competitive cost and distinguished product quality

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Canadian Solar Manufacturing Footprint

Country	Location	Products	Capacities – MW*
Canada	Guelph, ON	**Module**	**500**
China	Luoyang, Henan	**Wafer**	**280**
		Module[1]	**500**
	Changshu, Jiangsu		**2,800**
	Suzhou, Jiangsu	**Cells**	**1,500**
	Funing, Jiangsu		**400[1]**

- "Reverse Pyramid" capacity structure: Wafer: 280MW, Cell 1,900MW, Module 3,800MW

1- All capacities as of Q2 2015, except Funing which will reach 400MW in September 2015; module capacity does not include OEM relationships

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Newest Funing Manufacturing Site – Production Start Today, May 18, 2015

The brief of FN plant :

1, Product:

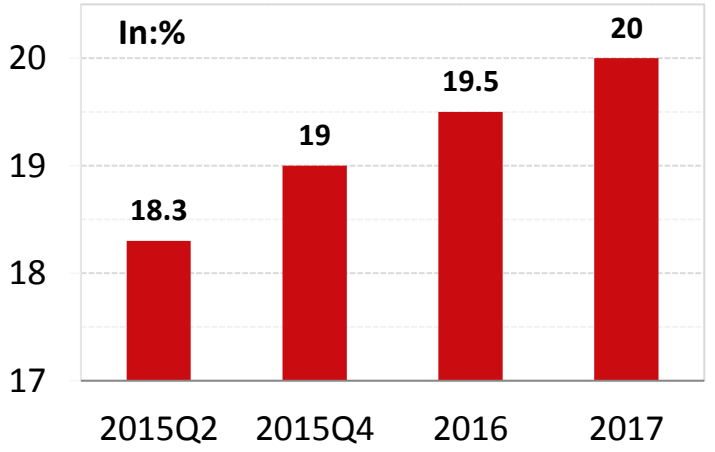
ONYX I, ONYX II

2, Capacity:

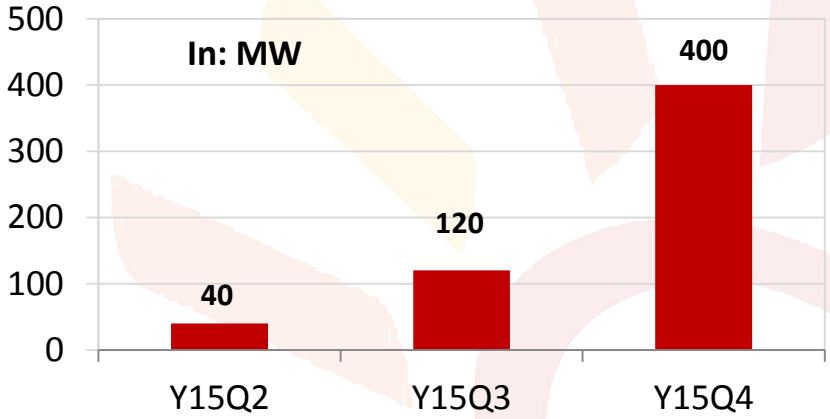
Phase I: 400MW in Y2015

Phase II, III: up to 1600MW

Onyx Cell Efficiency Roadmap



2015 Cell Capacity Ramp-up Plan



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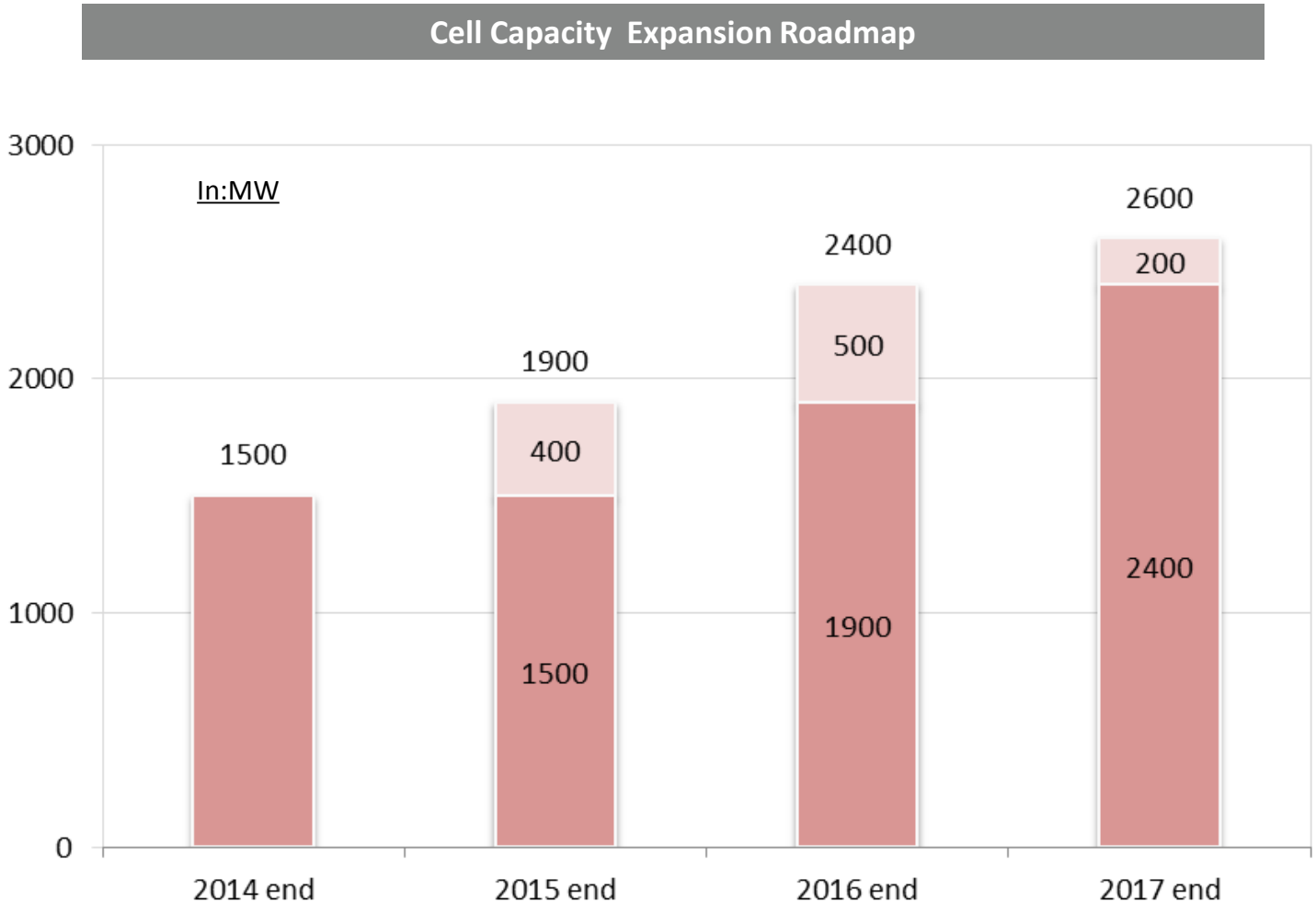
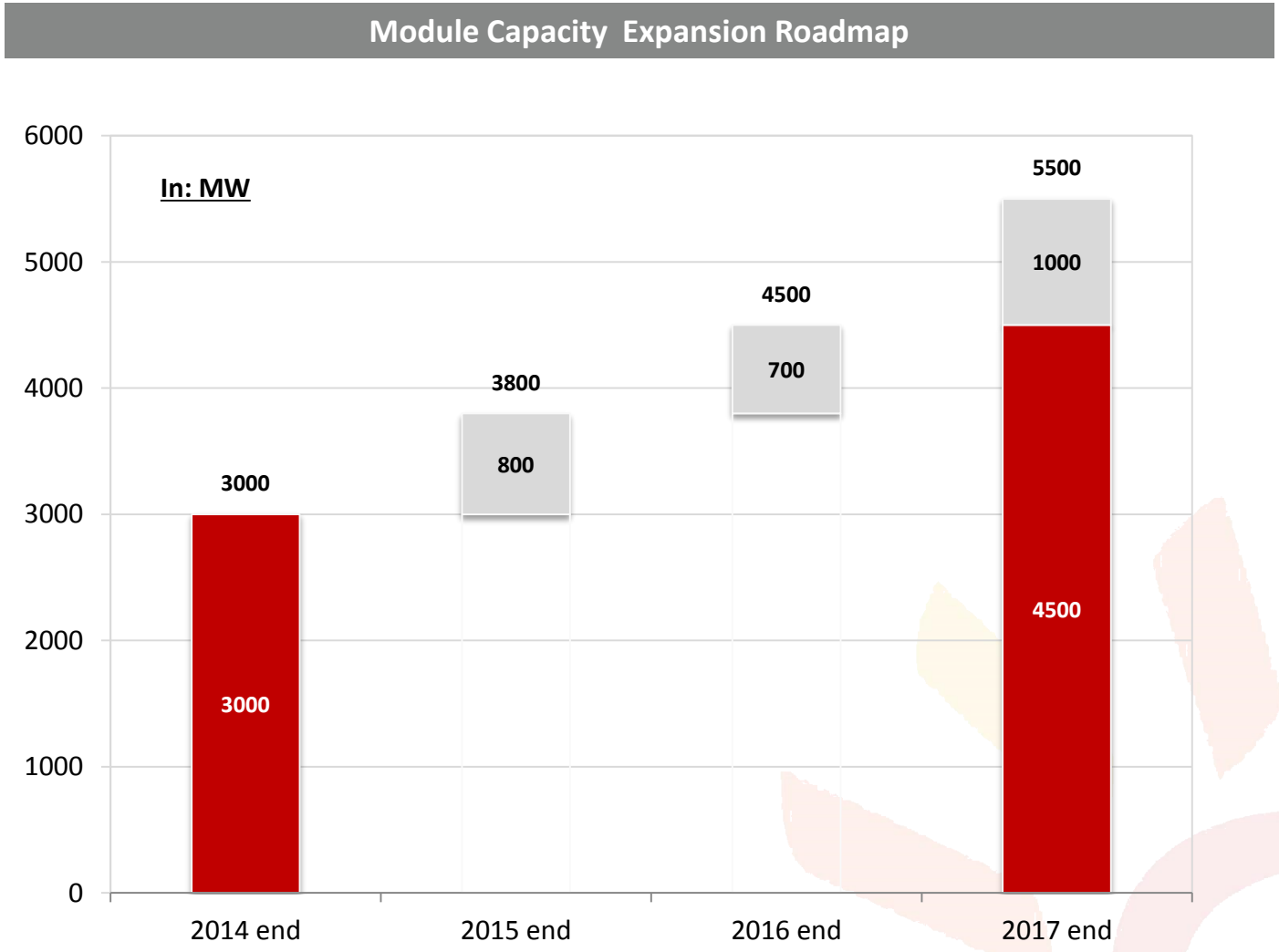
Canadian Solar Cell Capacity Expansion Roadmap



Canadian Solar Module Capacity Expansion Roadmap



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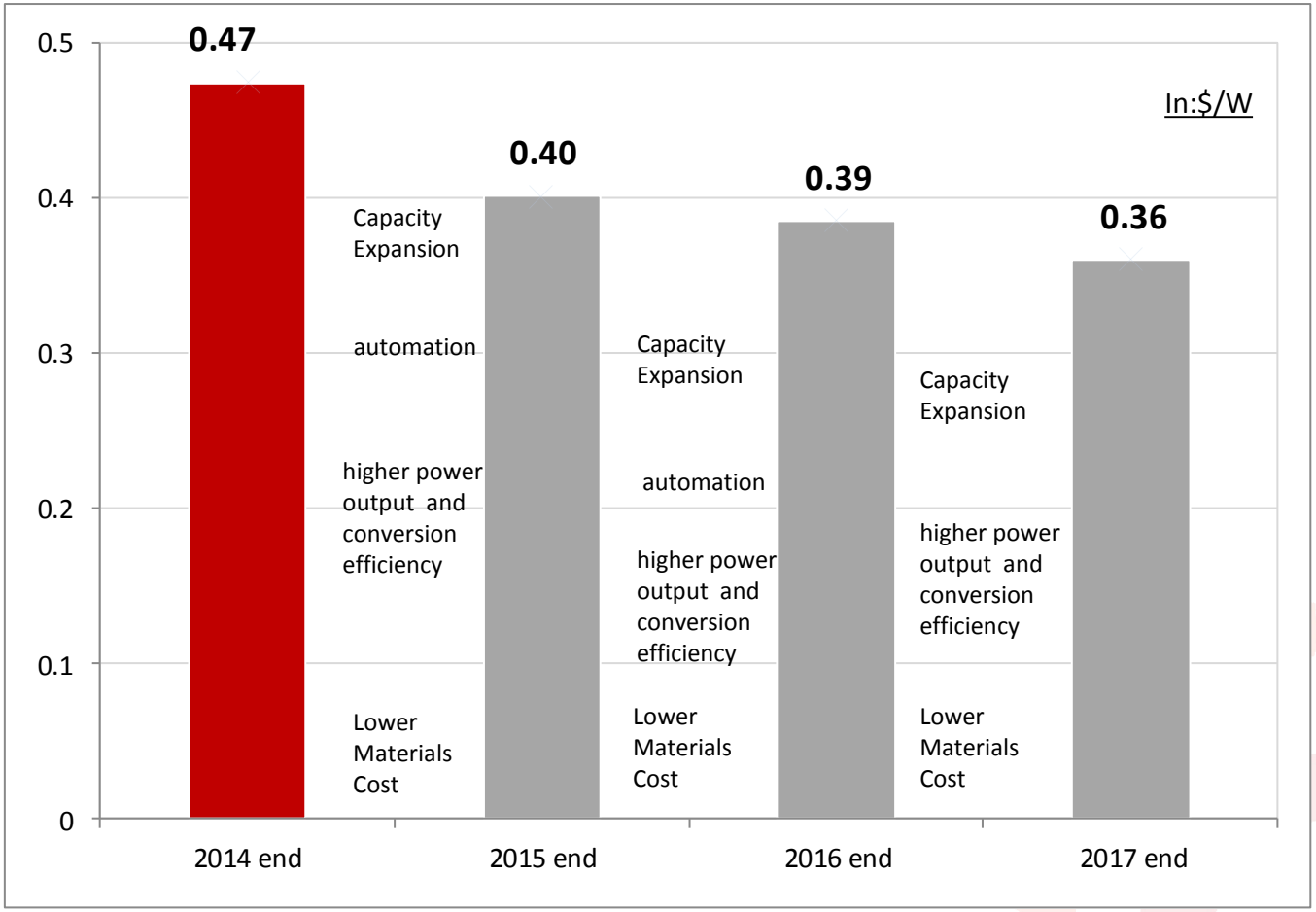
Canadian Solar Cost Reduction Roadmap

Cost Reduction Roadmap for Module(6P-P) & Cell(P156) In CN



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Agenda Today

- Strategy Overview
- **Module Business**
  - Technology and Cost Roadmaps
  - **Sales and Marketing**
  - Q & A
- Lunch Break
- Energy Business
- YieldCo Opportunity and Guidance
- Closing Remarks

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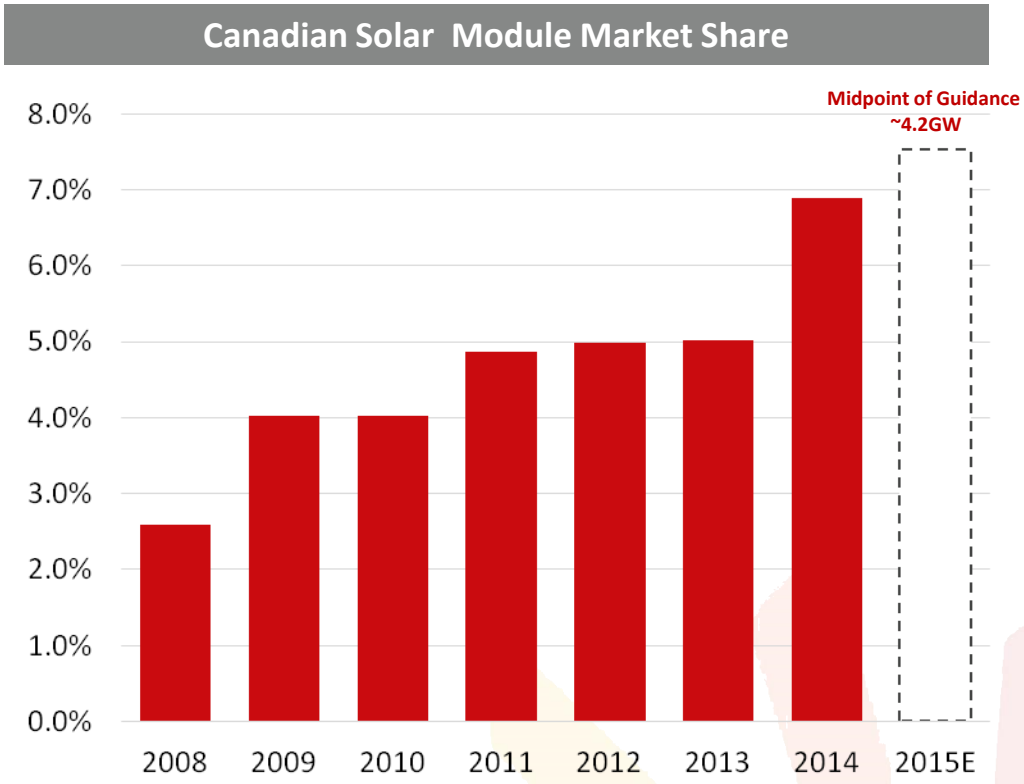
We are Gaining Market Share

- Strong brand
- Bankability
- Global footprint
- Quality and Energy yield
- Effective sales force



Source: IHS, Canadian Solar Analysis

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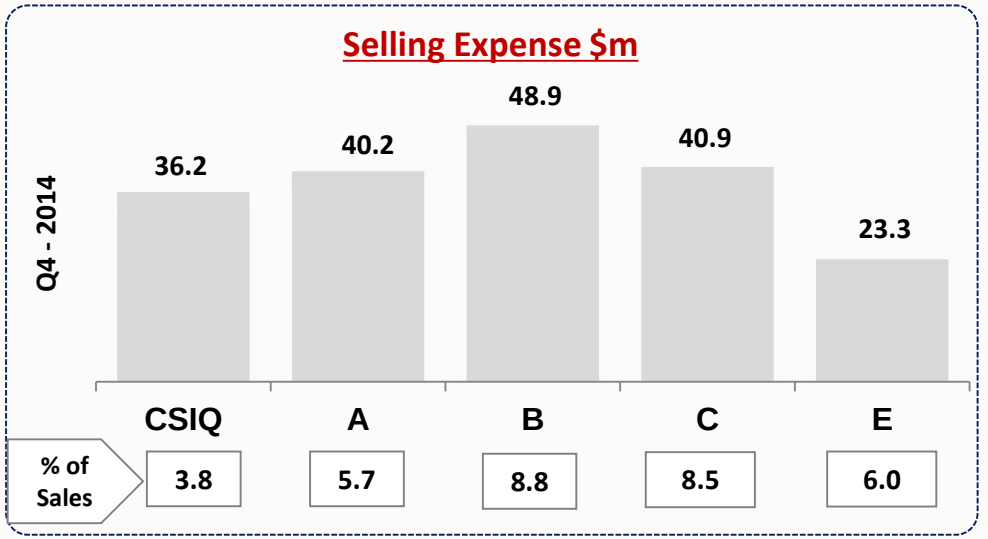
Best In-Class Sales Operations Management

- Industry leading sales operations management:
  - Fast payment cycle
  - Low inventory
  - Low selling expense
- Close to zero bad-debt in 2014
- Highest ASP among all China based manufacturers in 2014.



Q4 2014	CSIQ	A	B	G	C	F	E
Receivable Days	42	75	113	60	97	NA	39
Payable Days	93	108	164	89	189	NA	132
Inventory Days	51	61	66	60	67	NA	102
Cash Conversion Cycle	0	28	15	31	(25)	NA	9

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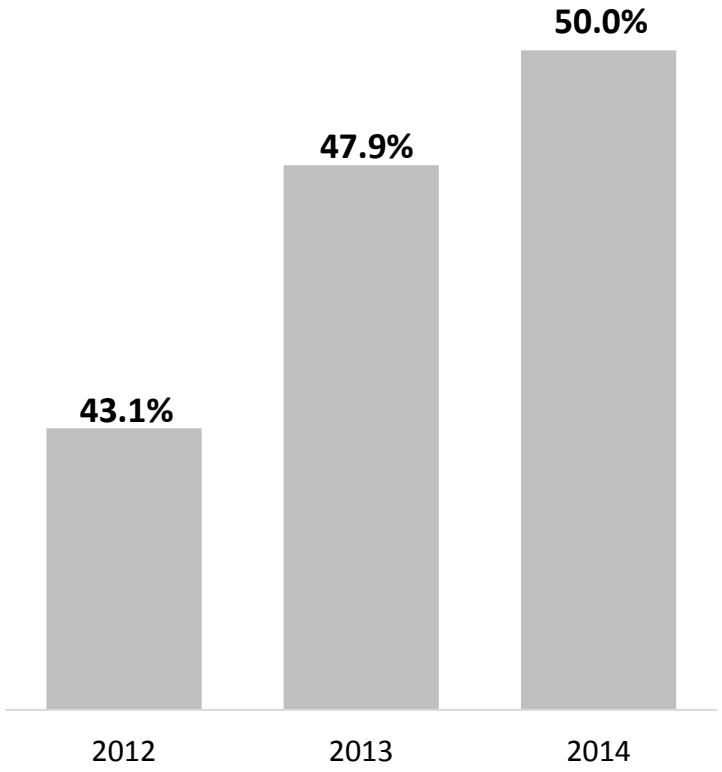
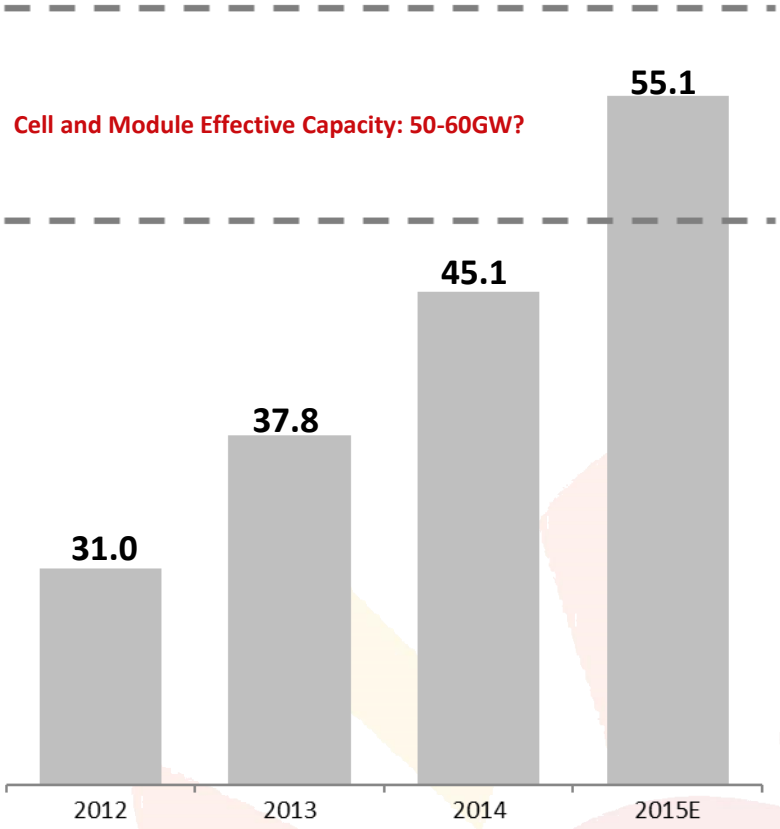
Industry Structure is Changing

1- Top-10 Market Share Consolidation



Top-10 module suppliers now account for 50% of the market.

2- Supply-Demand Balance is Tightening



Module demand is approaching estimated production capacity.

Source: Global PV module demand assumptions from Solarbuzz, IHS, Canadian Solar analysis

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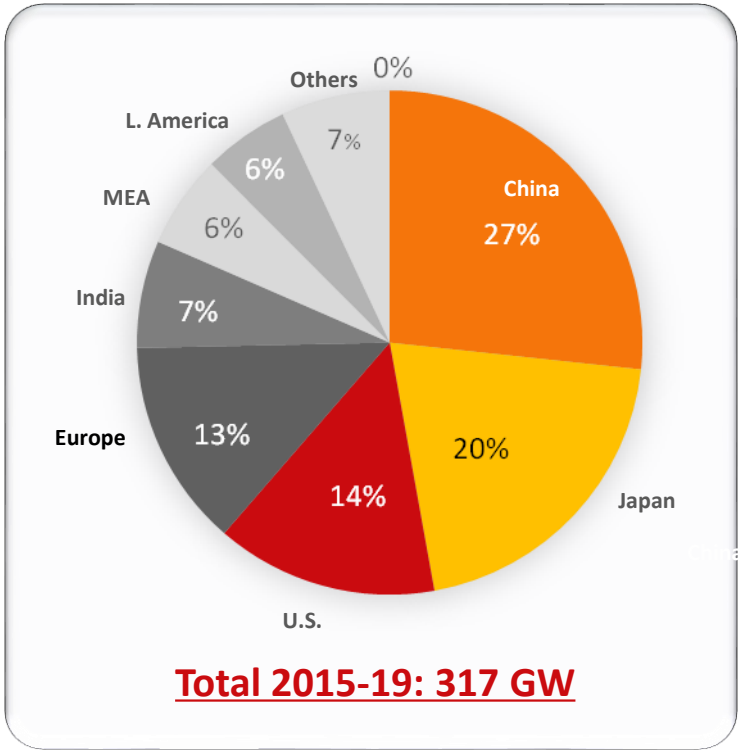
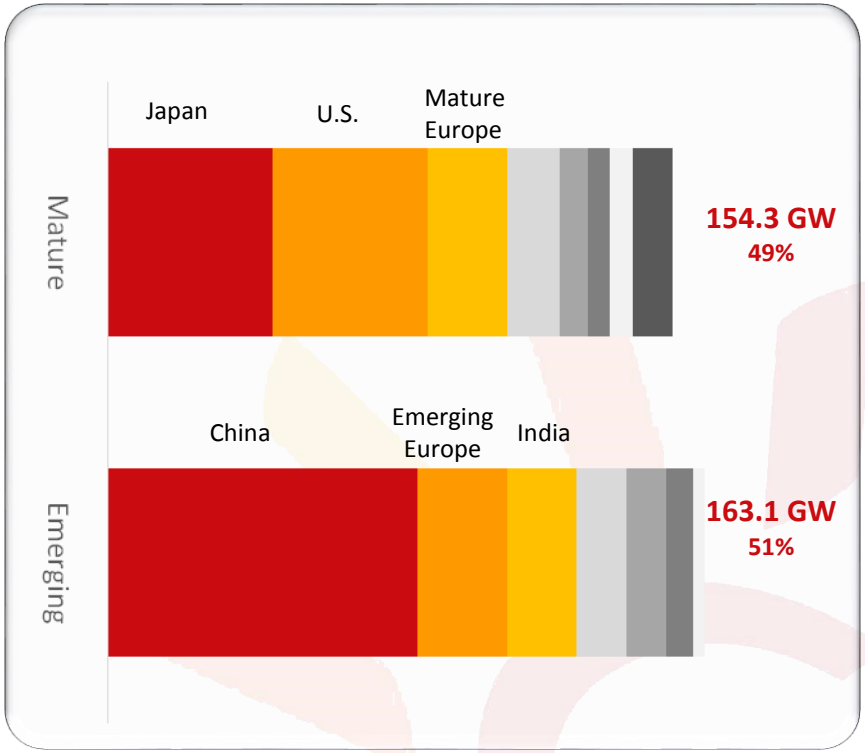
The 2015-19 Opportunity in Regional Markets is Large

- Mature markets: diminishing government incentives, grid-parity and evolving storage solutions will drive growth of distributed generation and self consumption.
- Emerging markets: utility-scale business, and hybrid micro-grid targeting on reducing diesel consumption will drive growth and create high margin opportunities for IPPs
- U.S., Japan, Europe, China and India remain core markets for Canadian Solar in the foreseeable future





Source: IHS, Canadian Solar Analysis

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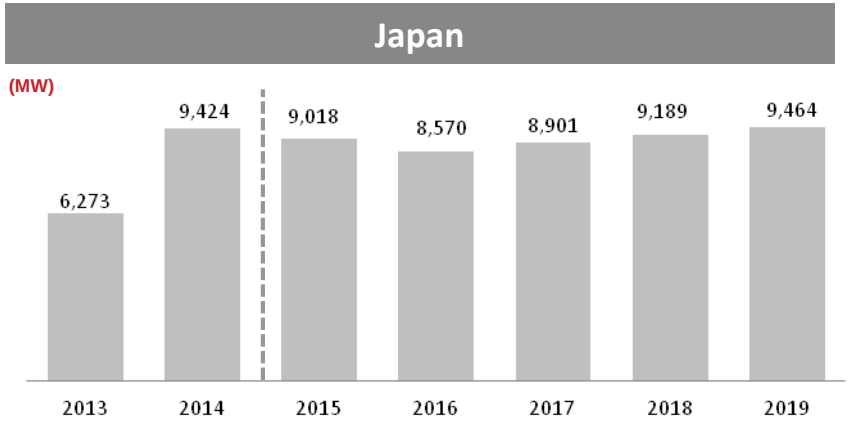
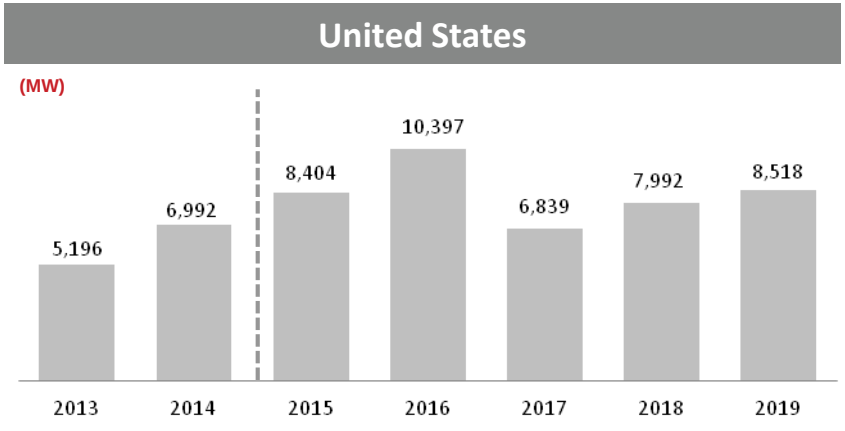
Solar PV Demand to Remain Robust in the US and Japan

Demand growth





Market update

- Second largest PV market in 2015-19 at 45 GW
- Utility-scale market driven by attractive FIT tariffs
- DG residential and commercial markets attractive over the long-term as utility-scale fades out

- Third largest market in 2015-19 at 42 GW
- Residential and commercial DG solar to grow fast driven by socket-parity, third-party owned business models and falling cost of capital

CSIQ position

- In 2014 Japan represented 25% of our shipments
- Established residential system kits and commercial turnkey solutions business
  - Estimated 8.4% market share
- Largest foreign PV module brand in Japan
- 605 MWp project pipeline

- Completed 162 MWp of projects in US in 2013-14
- Key module supplier to local utility companies and private solar developers
- 1.0GWp project pipeline
- Over 100MW signed DoD module supply deals

Source: IHS, company information.

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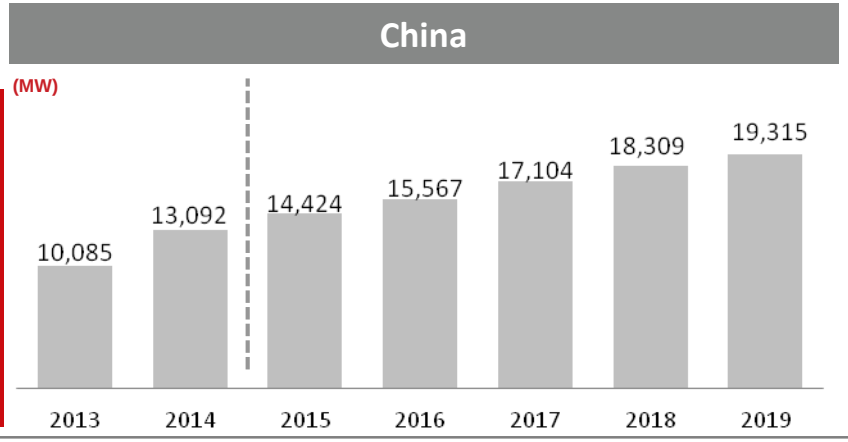
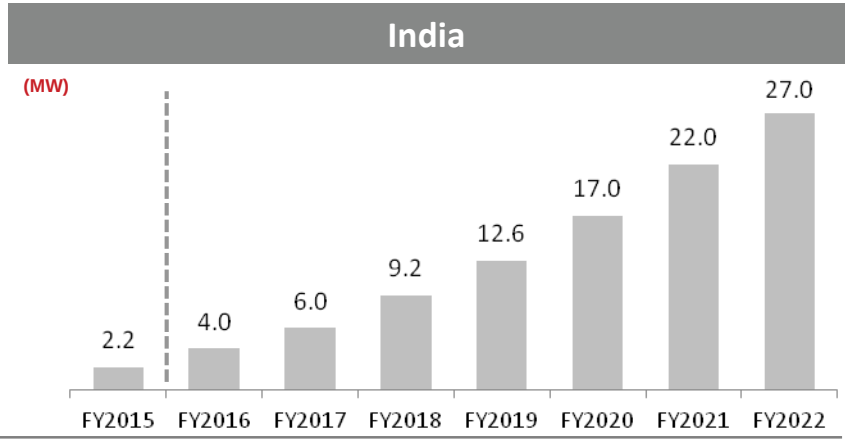
Positive Developments Driving Growth in the China and India

Demand growth





Market update

- Plans to decentralize power industry in terms of financing, regulation and electricity distribution
- Emerging residential and small commercial solar DG will sustain future growth.

- Positive progress in India's solar environment with with target instalations of 100GW by 2022.
- Confidence level is rising and the market is becoming much more dynamic.

CSIQ position

- Canadian Solar has been aggressive in utility scale build to own project development; plan to connect 320MW by end of 2015.
- We shipped 200MW of modules in 2014 and plan to at least double this volume in 2015, but with tight control on payment risks.

Source: IHS, company information.

Customers / partners

GMR Creating tomorrow today
TATA POWER SOLAR ENABLING SOLAR EVERYWHERE
ADITYA BIRLA GROUP
Punj Lloyd

- We have been the market share leader in India (excluding First Solar) with completed sales of >0.5 GW to date in India
- Exploring a deeper presence in India including utility scale, large rooftop projects and local manufacturing.

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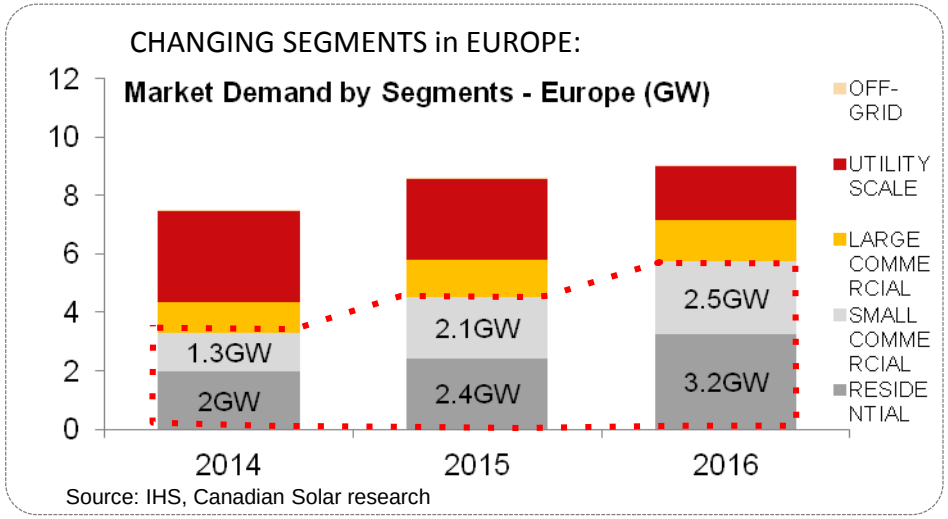
Direct Sales and Solutions Opportunity in Europe is Attractive



Source: IHS, Canadian Solar research

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Diesel Displacement Off-Grid

- Turnkey EPC Solutions/ IPP for diesel displacement (off/weak grid) in emerging markets.
  - Market size: 600GW diesel facilities around the world and minimum 100GW can be replaced with solar.
  - Margin potential is high – EPC alone carries 30-40% gross margin so currency risk is not a big concern.
  - Demand is solid, less government involvement,
  - Large: Mining – 5-20MW,
  - Mid size 1: 0.5-5MW: Islands, Off/weak grid commercial/industry.
  - Mid Size 2: Public facilities such as school, hospital, jails and telecom (not desirable given payment risks, government).
  - Small size: villages, off grid agriculture

Key Markets Trends

Mature Markets

- Reduced government incentives, retail grid-parity, together with rising utility prices will drive most mature markets into self consumption mode
- Less room for intermediaries therefore direct channel is now dominating
- Digital B2C platforms become critical to lower the cost of end customer acquisition
- Strong demand for low cost, customized energy storage and management system
- Opportunity for IPP[1] and/or turnkey solutions in Commercial/Industrial rooftop
- Utility-scale still present, albeit supported by grid-parity PPAs[2]

Emerging Markets

- Demand for modules driven by utility-scale build-out
  - More and more new markets will launch grid-parity PPA bidding for solar PV
  - Volume driver with low- to mid-teen gross margin.
- Off/weak grid and diesel displacement presents an attractive opportunity
  - Demand is high
  - Plenty of margin
  - Bank financing may become available
  - Need bankable market makers

1. Independent Power Producers; 2. Power Purchase Agreement

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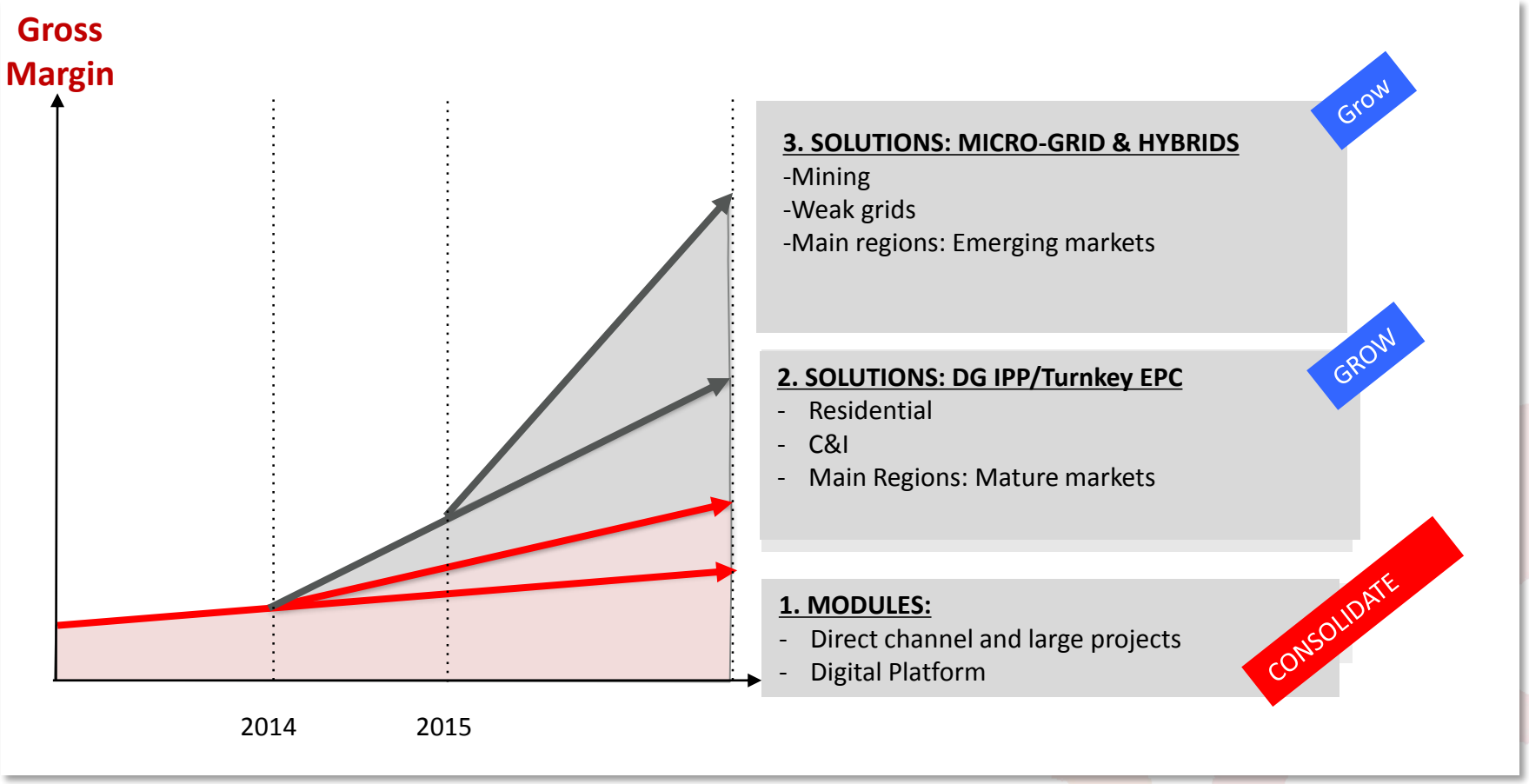
Total Solutions Opportunity in Mature and Emerging Markets

"Capture the present from modules business while building the future with solutions business"

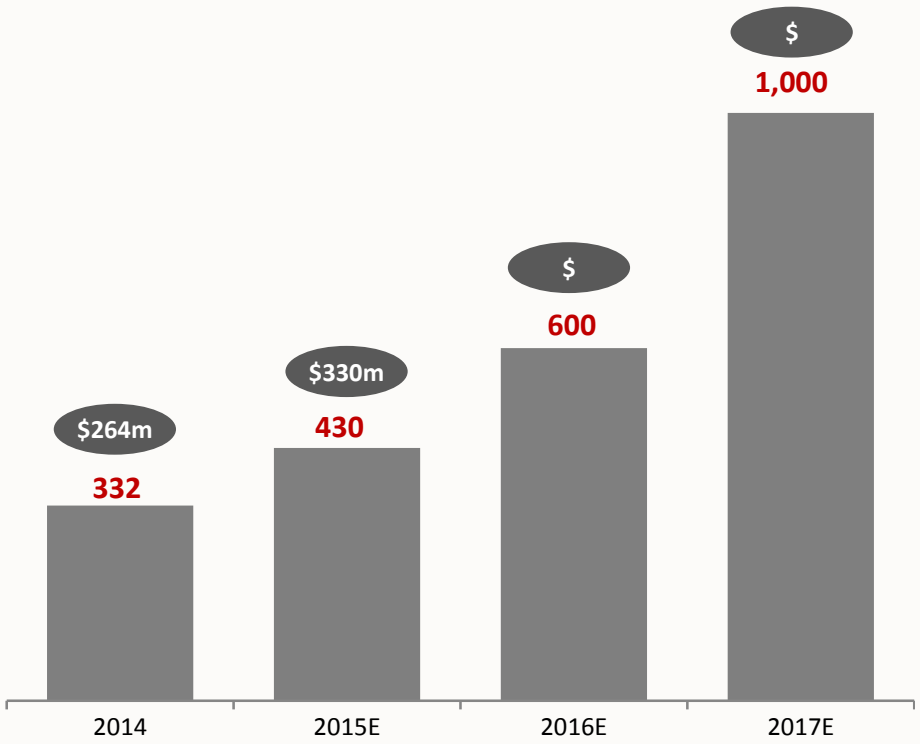


We Plan to Grow Direct Sales and Solutions Business….

Solutions Sales

- Direct sales at premium pricing of modules and balance of systems (BOS)
- Digital channel sales of modules and BOS
- EPC Turnkey for commercial DG
- Micro-grid

Direct Sales and Solutions Internal Targets - MW



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The Direct Sales Channel Offers the Entire Bundle

PV

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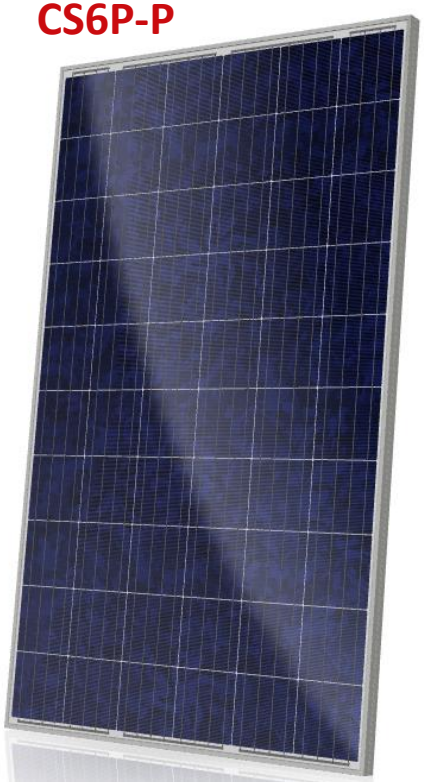
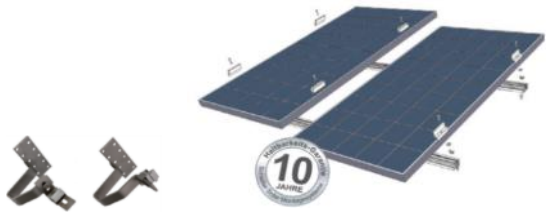
CS6P-P



+

BOS

Racks



Inverters

Cables

B2C: Digital Channel for Mature Markets (Residential DG)

1

MARKETING

F2F

DIGITAL

2

SALES

TELESALES

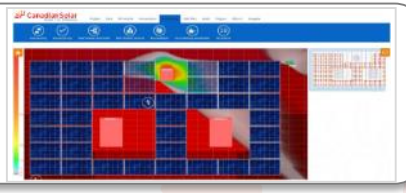
B2C

LEAD GENERATOR

B2B

OFFER CREATOR

Solar.Pro.Tool



WEBSHOP

Magento
an ebay inc company

3

OPERATIONS

odoo

ERP / CRM

firewall

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We have a Established Position in Japan Direct Sales and Solutions

System Kits

Market Entry:	2014 Revenue:
2009	$97m

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Turnkey Solution Case Study – IKEA Australia

- **PV Project:** 3.6 MW Roof-Top PV Projects for IKEA Australia
- **City, State, Country:** Logan (QLD), Rhodes (NSW), Marsden Park (NSW), Springvale (VIC) and Richmond (VIC), Australia
- **Application Type:** Solar Power Generation Systems, multi-states nation-wide deployment
- **Installation Type:** Large Commercial Rooftop PV
- **Total System Size:** 7 projects, total 3.6 MW
- **Annual System Output:** 4,658 MWh/year
- **CO2 Emission:** 4,742 metric Tons
- **System Activated:** August 2014
- **Module Type:** CS6X-P and CS6P-P
- **Owned By:** IKEA Australia Pty Ltd
- **Developed By:** Canadian Solar (Australia) Pty Ltd
- **Constructed By:** Canadian Solar (Australia) in conjunction with Lamco Solutions, Smart Commercial Solar and CSA Services

»We have a long-term approach to sustainability, globally our ambition is to switch to renewable energy to become energy independent by 2020, and we're well on the way. For an installation of this size, installing solar systems on to the roofs of our stores and warehouses here in Australia is a considerable undertaking and each of our sites' has had its challenges. It's important to us and our business to ensure we have efficient, reliable high quality product together with a competitive offer, expert knowledge and experience.«

Richard Wilson
Sustainability Manager
IKEA Australia

CanadianSolar
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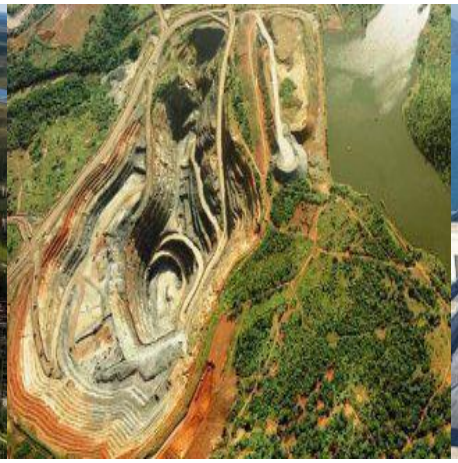
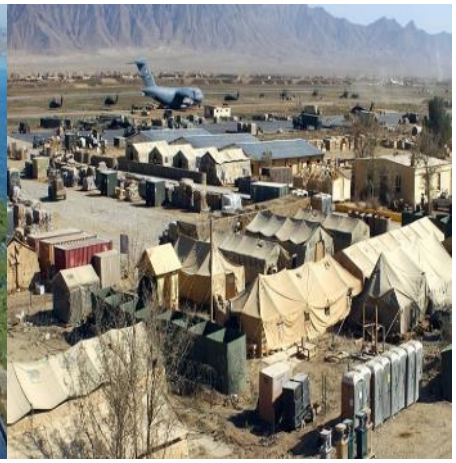
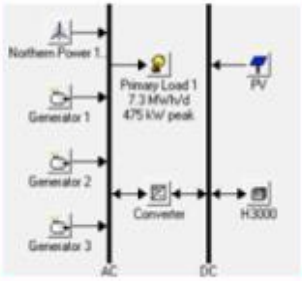
Micro-grid One-Stop Shop Service

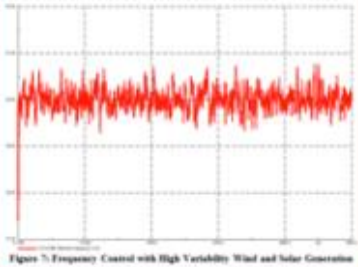


Community Energy Plan including load long term planning, conservation, efficiency and demand response opportunities, and local wind and solar resource evaluation

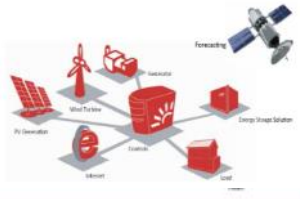
Static Power System Sizing and Feasibility Study



Dynamic Power System Feasibility Study and System Sizing fine Tuning



Design Validation at the Renewable Energy (RE) Testing Centre



System EPC and Commissioning

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Agenda Today

- Strategy Overview
- **Module Business**
  - Technology and Cost Roadmaps
  - Sales and Marketing
  - **Q & A**
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