



# **Investor Presentation**

Third Quarter 2019 Update December 9, 2019

CSIQ NASDAQ Listed

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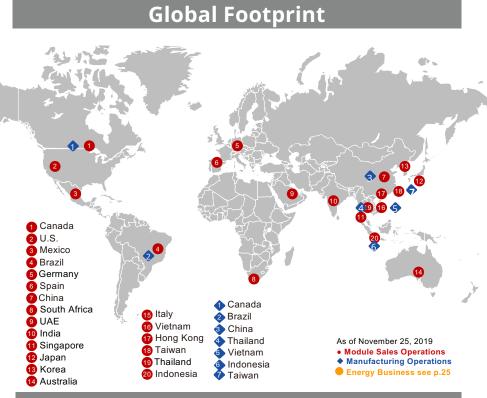
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## **Company Description**

- Leading solar module manufacturer and utility-scale solar developer with one of the world's largest solar project pipelines
  - Founded in Ontario, 2001
  - Listed on NASDAQ (CSIQ) in 2006
  - Over 13,000 employees globally
  - Presence in >20 countries / territories
  - One of the world's largest solar module suppliers
  - Proven utility-scale project development track record

## **Module and System Solutions**

- 2019 shipment guidance: 8.4-8.5 GW
- Competitive cost structure
- Leading bankable brand with global reach



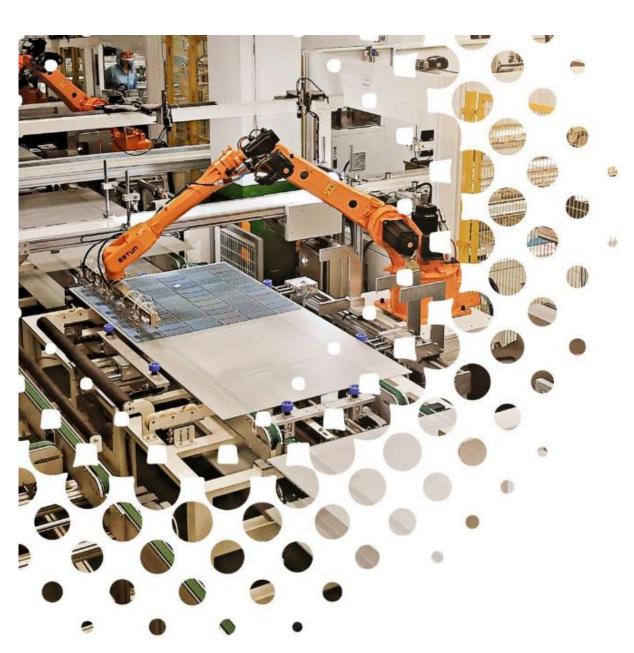
### **Energy Business**

Development and construction of utility-scale solar plants / projects primarily in North America, Asia Pacific, Latin America and Europe, Middle East and Africa



### **Investment Thesis**

- Positioned to benefit from long-term growth in demand for solar energy
- Differentiated, resilient business model leveraging strong sales channel, low cost manufacturing, own project development and EPC capabilities
  - Leading module manufacturing platform, delivering high quality products to over 160 countries
  - One of the world's largest utility-scale solar developers and EPC providers with successful operations in 6 continents
  - Consistently profitable over the last 7 years
- Attractive valuation supported by resilient financial performance
- Experienced and strategically prudent management team and board



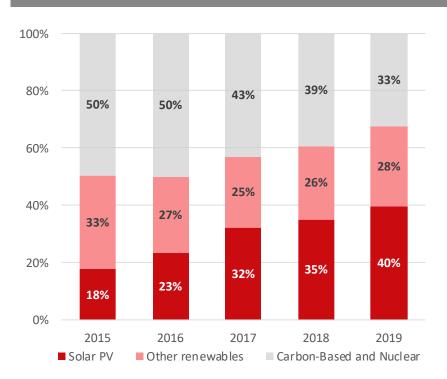
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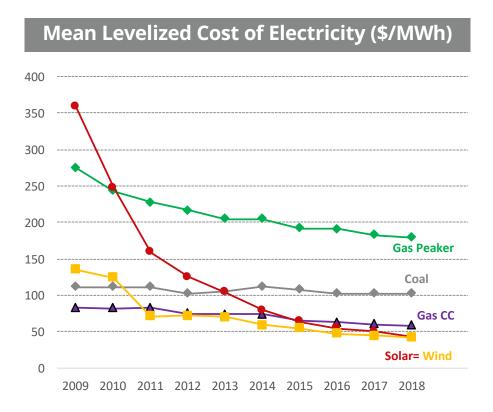
## Solar energy has already become mainstream...

- Solar energy adoption is accelerating, driven by policy support and competitive economics
  - Solar energy currently delivers the lowest levelized cost of electricity in most geographies
  - From 2016 solar capacity additions outpaced other sources, and in 2019 exceed all carbon based sources

### **Global Generation Capacity Addition Mix (GW)**

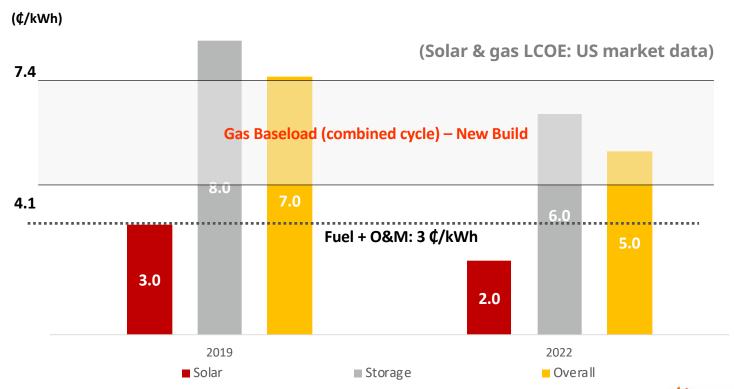


Source: BNEF New Energy Outlook 2019, Lazard 2018 LCOE Report.



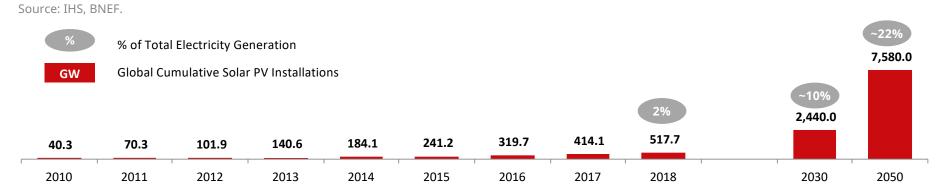
# Solar plus 4 hours of storage is competitive with gas generation and on a path to become cheaper than gas in the years ahead

- Recently issued PPAs in the US are **\$4-5 c/kWh** for PV + 4h storage (to be connected in 2021-2024).
- Majority of new solar PPAs in California and a big portion in the US require storage capacity.
- Rising carbon prices, increasing demand for electricity support solar energy adoption
- >800 GW of fossil fuel capacity is expected to retire over the next decade and >2,700 GW over the next 3 decades.

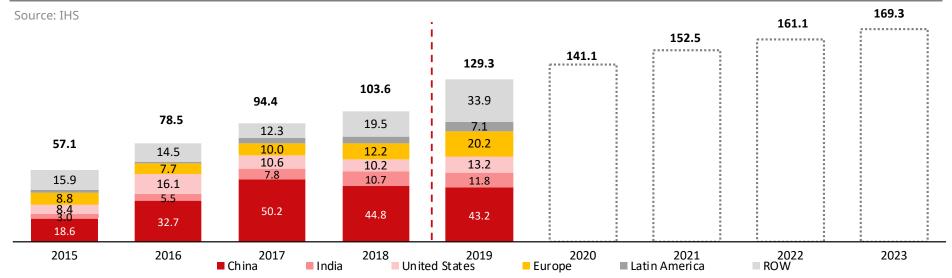


# Key energy markets remain underpenetrated providing long-term visibility into the demand environment for our business

#### Solar energy will grow from 2% of global electricity generation today to around 10% by 2030



#### Independent analysts expect near term growth in demand for modules to be healthy



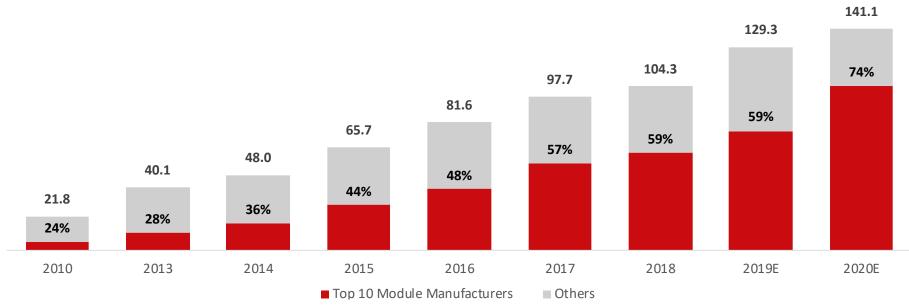
Disclaimer: Industry forecasts in the above charts and elsewhere on this presentation are provided by third-party industry analysts. There can be no assurance that any such forecasts are accurate or that they will be achieved. Although we have not independently verified the accuracy of these forecasts, we believe them to be reliable and reasonable.



# Industry consolidation is shifting the basis of competition to nonprice attributes

- Growing customer loyalty driven by:
  - Brand and bankability<sup>(1)</sup>
  - Reliability and predictability of delivery and other services
  - Long-term partnership

## Market Share of Top 10 Module Manufacturers (%) vs. Annual Shipments (GW)



Source: IHS, company filings, Canadian Solar estimates.



<sup>1.</sup> Bankability indicates ability to raise debt from financial institutions to fund project development, construction and ownership. Financial institutions may conduct due diligence on module manufacturers to verify product quality and reliability as well as overall financial condition, and will only finance projects using modules from "bankable" suppliers.



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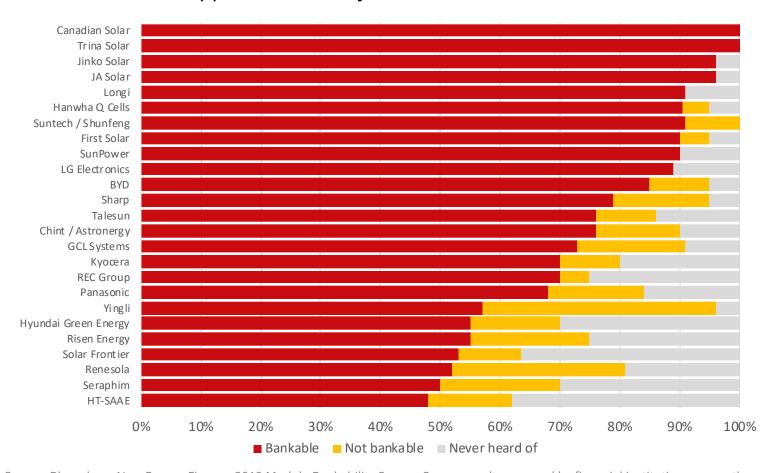
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# Leading module and total solutions provider with a track record of delivering high-quality products and services in over 160 countries

- World-leading bankable brand with global footprint
- Leader in solar cell and module technologies, with homegrown innovation driving product differentiation
- Technology-agnostic cell and module manufacturing capacity
- Best in class sales operation management
- Optimized sales channel strategy, delivering higher ASPs and providing sustainable competitive advantage
- Opportunity to leverage captive market to grow systems solutions and energy storage business

## World-leading bankable brand

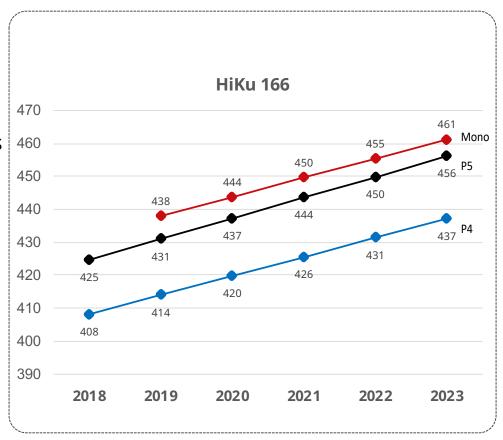
- No. 1 Bankable Module Supplier, Bloomberg New Energy Finance 2019 Bankability Survey top bankable module supplier with **100% bankability for 3 consecutive years**
- No. 1 Module Supplier, for Quality & Performance-Price Ratio, IHS Markit, 2016



Source: Bloomberg New Energy Finance 2019 Module Bankability Survey. Survey results are used by financial institutions across the world for credit analysis. Respondents include banks, funds, EPC contractors, independent power providers (IPPs) and technical advisors.

# Leader in solar cell and module technologies, with homegrown innovation driving product differentiation

- Among the first solar PV manufacturers to **mass produce**:
  - Black silicon and diamond wire saw (DWS) poly wafers
  - 5 busbar (5BB) and multi-busbar cells (MBB)
  - Half-cut cells
  - Large 166 mm wafers
  - Double glass and bifacial modules
- and half-cut cells

































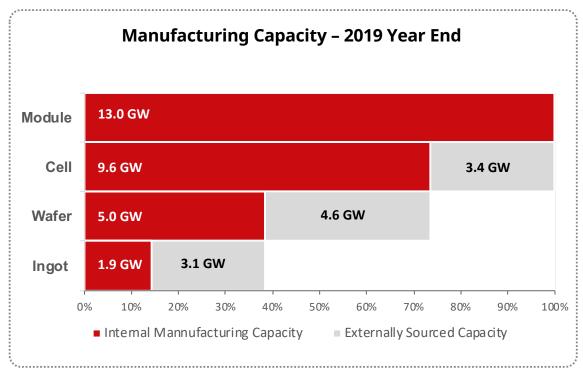






## Technology-agnostic cell and module manufacturing capacity

- Our cell capacity is convertible to produce mono- or multi- with low or no additional capex requirements
- During 2018/19, gross margin of multi-product has exceeded that of mono-product by 400 basis points
- Inverted pyramid manufacturing capacity frees resources to focus on downstream businesses



Capacity by Geography

73%

Module

19%

China Thailand Other

68%

Cell

32%

Note: 2020 planned capacity additions: 2.2GW module, 500 MW ingot

Note: Other include Vietnam, Taiwan, Brazil, Canada



## **Best-in-class sales operation management**

- Industry leading operations management and efficiency:
  - Fast payment cycle
  - Low inventory
  - Negative cash conversion cycle
  - Close to zero bad debt in 2017-2019 YTD
- Highest module ASP among all China based manufacturers in 2019 YTD.

## **CanadianSolar**

<b>2017-2019YTD</b> Average	CSIQ <sup>(1)</sup>	Jinko Solar	LONGi	First Solar	SunPower
Inventory Days	46	89	92	58	72
Receivable Days	54	101	133	74	41
Payable Days	120	174	214	30	72
Cash Conversion Cycle	(20)	16	11	102	40

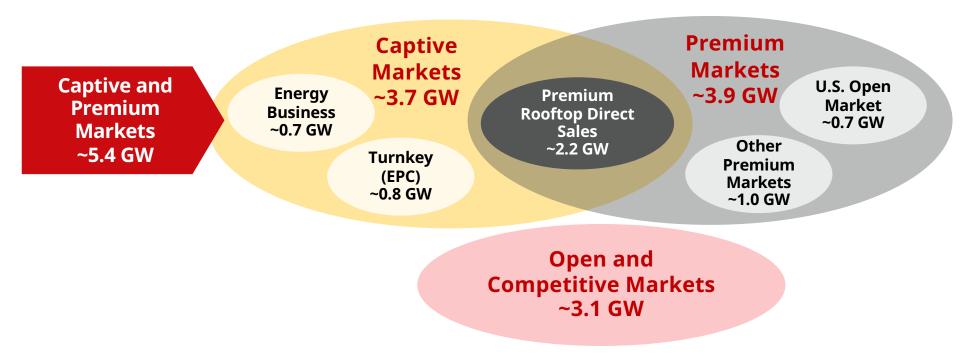
Source: Company filings.

(1) CSIQ inventory and receivables are gross amounts i.e. adding back provisions and bad debt allowances, respectively. Using net amounts would reduce average inventory and receivable days.

CanadianSolar

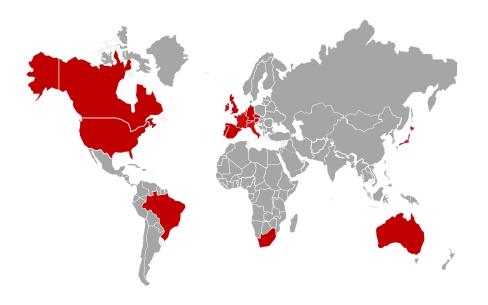
# Optimized sales channel strategy, delivering higher ASPs and providing a source of sustainable competitive advantage

- Captive market opportunity in 2019 totals ~3.7GW
  - Container size direct sales to premium rooftop installers, stable predictable quarterly demand
  - Our own energy business projects
  - Turnkey solutions
- Other premium high price markets in 2019 total ~1.7GW, including U.S.



## Premium rooftop markets is a captive market for Canadian Solar

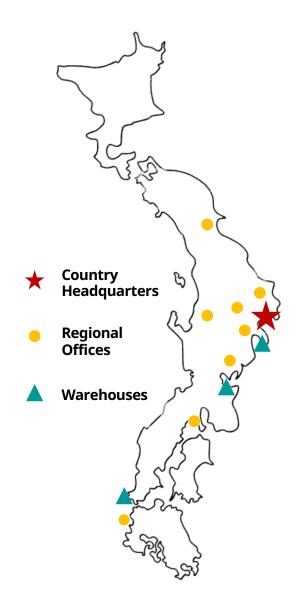
# Direct Sales Channel to Premium Rooftop Markets



Container-size orders at a premium price Stable and predictable quarterly demand

Shipment & Market Share	~2.2 GW in 2019 ~20% market share in target residential & small commercial markets		
ASP Premium	2~3 ¢/W		
Target Markets	Japan, Australia, US, Canada, Brazil, South Africa, EU		
Barriers to Entry	<ul> <li>Dedicated teams</li> <li>Product differentiation &amp; positioning</li> <li>Financing &amp; insurance</li> <li>Warehousing, training &amp; technical support</li> <li>Dedicated channel policies &amp; management, co-marketing</li> <li>→ Customer loyalty</li> </ul>		

## Japan is a premium market with 2-3x profitability



## Strong Brand Name and Presence in Japan:

- No.2 residential solution supplier behind Panasonic but ahead of Toshiba, Sharp & Kyocera- among the few foreign household brands in Japan.
- No.1 module supplier with ~10% market share in one of the most highly-priced solar module markets globally.
- ❖ Top utility project developer, ~1 GW grid connected & late-stage projects, supported by financing facilities such as the J-REIT listed in the Tokyo Stock Exchange (9284.T).
- Local presence: 9 offices, 230 employees, nation-wide services centers, warehouses and logistics.

## Downstream total solutions is a captive market

# Project Development and 3<sup>rd</sup> Party EPC Markets



- Project Development: 1.2 GW in 2019,
   2~3 GW NTP annually after
- ❖ 3<sup>rd</sup> Party EPC: 1 GW in 2019, >1.5 GW from 2020

### Why 3<sup>rd</sup> Party EPC?

**Shared OPEX** with both MSS & EG business

#### **Additional Profits:**

- Embedded margins from module, components & optimized solution
- Margins increased by 100%~300% on top of module sales

#### **Controlled Risks**

- Project/Market tailored JV/Partnership structure to manage construction
- Constructor's performance bond directly to project owner

**Enhanced Opportunities** by bankability, brand & balance sheet



# Opportunity to leverage captive markets to grow our systems solutions and energy storage business (SSES)

### **Enabling Technologies:**

- Power Electronics
- Energy Storage
- IoT, Big Data, AI, Cloud Computing

PV Product Maker

- Capital intensive
- Manufacturing automation



**Technology Migration** 

Solar Generation

- More merchant based PV assets, requiring storage & market trading capability
- Technology to enhance intelligence
- Higher investment returns on innovation



**Economics and Safety Driven Interactions** 

**Power Grid** 

- Grid resilience and safety
- Renewable accommodation



# We expect system solutions and energy storage to become an important part of our business in the years ahead

Canadian Solar already generates revenue from O&M, EPC, Inverters and System Kit offerings

### **100% Addressable Captive Markets**

## **Energy Group**

- Inverters
- Trackers
- Storage
- EPC
- O&M

## **Turnkey Solutions**

- Inverters
- Trackers
- Storage

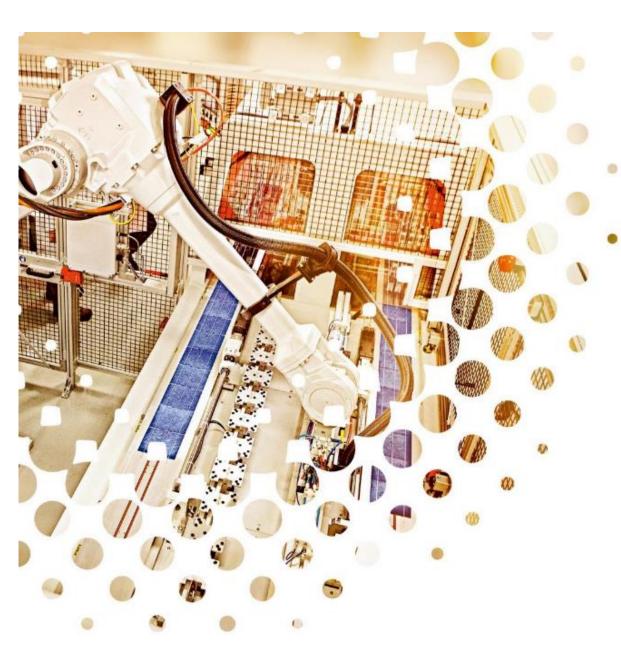
# MSS (Module & System Solutions)

- System Kits
- Module-Level Power Electronics (MLPEs)
- Inverters
- Storage

Optimized module, inverter, tracker & storage packaged system solutions

MLPEs, inverters, mounting, storage, monitoring





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## Leading utility-scale solar developer with global presence

- Track record developing, building and operating solar power plants across several major energy markets in 6 continents
- Proven capabilities at all stages of the solar development value chain
- Relationships with leading players in the global solar energy ecosystem
- Success launching Japan's largest solar infrastructure fund
  - Opportunity to control asset over its life-cycle, uplift from repower opportunity
- Globally diversified project pipeline with strong competitive position in key markets

The competitive price of solar energy combined with the rapidly declining cost of storage is expected to drive exponential growth in solar power plant deployment in the quarters ahead.

# Leading utility-scale solar developer with global presence



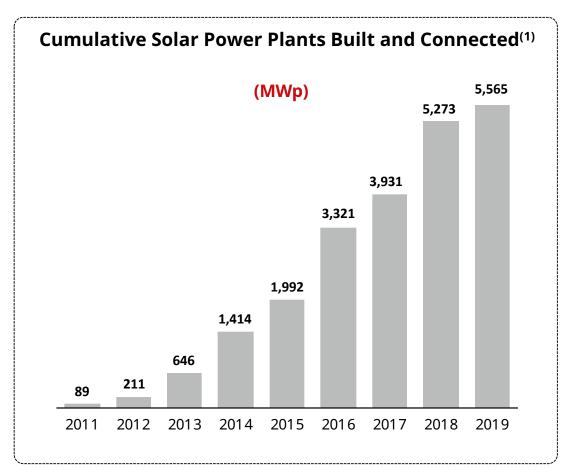


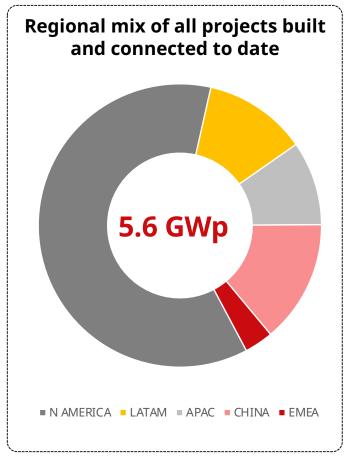






# Track record developing, building and operating solar power plants across major energy markets in 6 continents

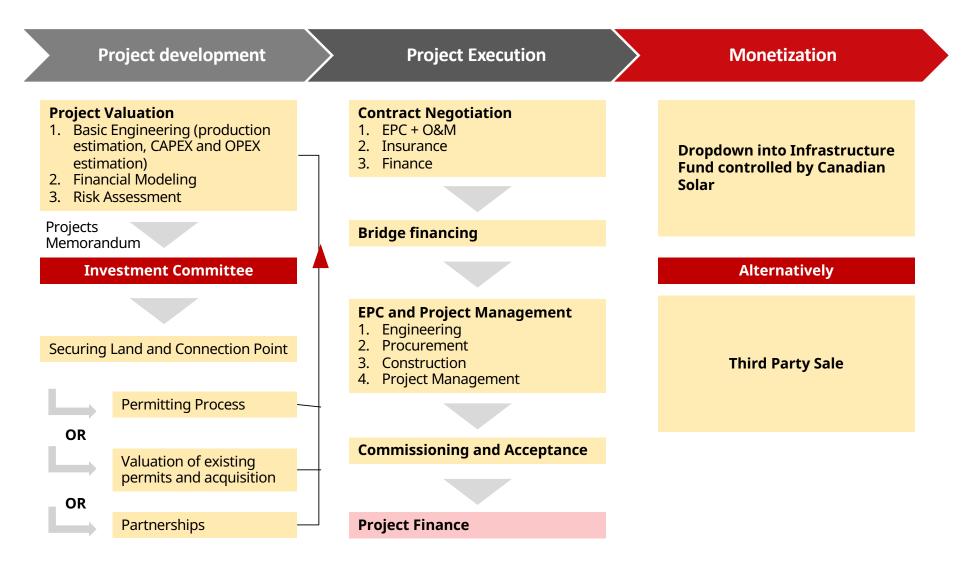




Source: Canadian Solar Inc.

(1) Includes projects built and connected by Recurrent prior to Canadian Solar's acquisition in 2015.

## Proven capabilities at all stages of the solar development value chain





# Established relationships with key financial players in the solar energy ecosystem































































































































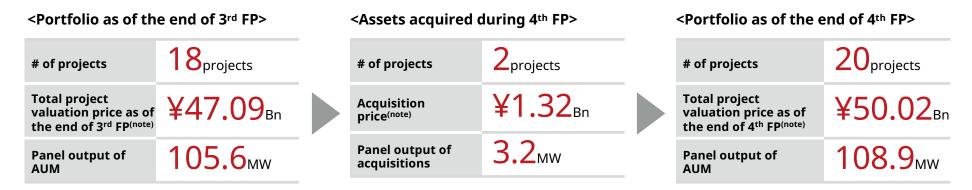




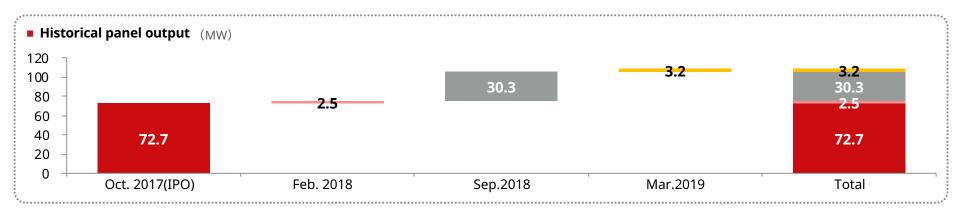


## Success launching Japan's largest solar infrastructure fund

Consistent growth of the largest listed infrastructure fund in Japan sponsored by Canadian Solar, assets under management on mark-to-market basis has exceeded ¥50Bn.



(Note) For owned assets as of the end of the 3rd at December 31, 2018 and 4th FP at June 30, 2019, "price" refers to the median project valuation report amount which is the estimated values provided to us by Pricewaterhouse Coopers Sustainability LLC and Ernst & Young Transaction Advisory Services Co., Ltd. in its project valuation reports as at December 31, 2018 and June 30, 2019. For assets purchased during the 4th FP, "price" refers to the acquisition price.



Note: As of June 30, 2019

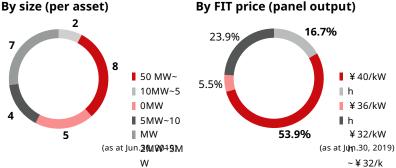
# Solar power plant assets dropped down by Canadian Solar into our Japanese Infrastructure fund as of June 30, 2019 total 108.9 MW...



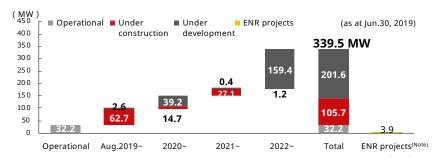
# ... and are expected to grow to 339.5MW in the next few years driven by Canadian Solar dropdowns

Achieve \100Bn in asset size over the medium term drawing on acquisitions from sponsor pipeline

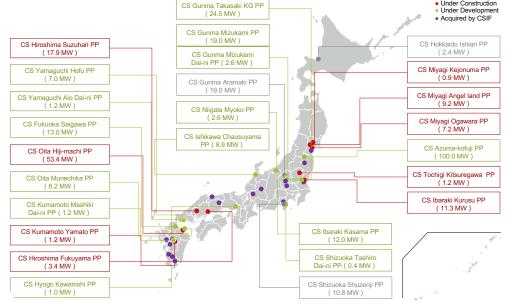
Sponsor portfolio snapshot FIT purchase price range: Mostly \32~\40/kWh Operational and under Under development Total sponsor portfolio construction **14** projects, **201.6** MW **26** projects, **339.5** MW **12** projects, **137.9** MW **ENR** projects (Note) 3.90 MW



Operational status of sponsor portfolio assets



Map of owned assets and sponsor assets



Source: Compiled by the Asset Manager based on disclosures by Canadian Solar Projects K.K.

Note: Total panel output of ENR projects are based on development plans as of June 30, 2019. Forecasted output and actual output may differ. Licenses and permits for ENR project development may not be completed and there is no assurance that these projects will reach completion nor be ready for commercial operation. With respect to these ENR projects, CSIF has been granted Exclusive Negotiation Rights from project developers. As at June 30, 2019, the sponsor does not retain ownership of these projects and there is a likelihood that the sponsor will not acquire the project among other reasons. As at June 30, 2019, CSIF does not intend to acquire these projects and there is no assurance that CSIF will acquire these projects.



Under Construction

Globally diversified project pipeline with strong competitive position in key energy markets

Early- Mid-stage pipeline

9.0 **GWp** 

Late-stage pipeline/backlog

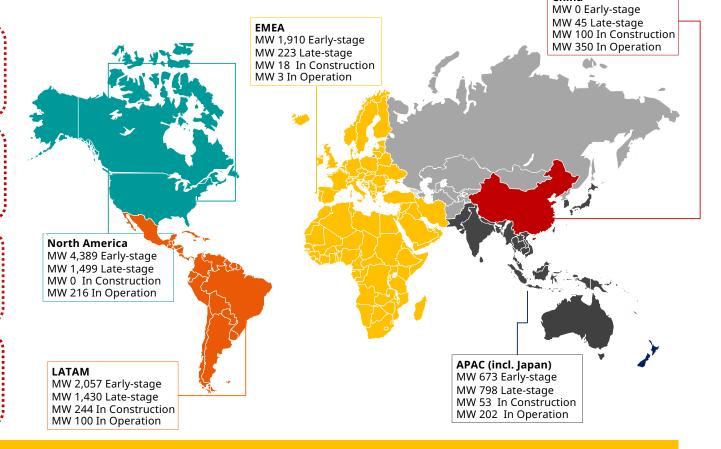
4.0 **GWp** 

Plants in construction

415 MWp

Plants in operation

871 MWp



### Canadian Solar total pipeline exceeds 13 GWp, providing visibility into demand over the next several years.

- Late-stage pipeline include projects that have passed the Cliff Risk Date and are expected to be built in the next 1 to 4 years. Cliff Risk Date depends on the country and is defined as the date in which the project passes the last of the high-risk stages (usually: Environmental approval, Interconnection agreement, Power Purchase Agreement). All late stage projects have secured or are reasonably assured to secure a PPA, or FiT. Some late-stage projects may not reach completion due to failure to secure other permits or changes in market conditions among other risk factors. Investors are advised to review a more detailed discussion of the risks factors contained in the company's annual report on Form-20F.
- \* Early stage pipeline 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 next two guarters.



## Strong competitive position in key energy markets - N. America

**4,389 MW**<sub>p</sub> Early- Mid-stage

1,499 MW<sub>p</sub>

Late-stage

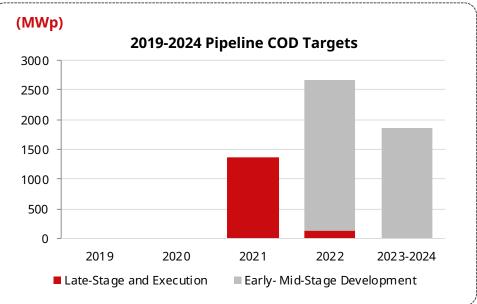
0 MW<sub>P</sub>

In Construction

**216 MW<sub>P</sub>** 

In Operation





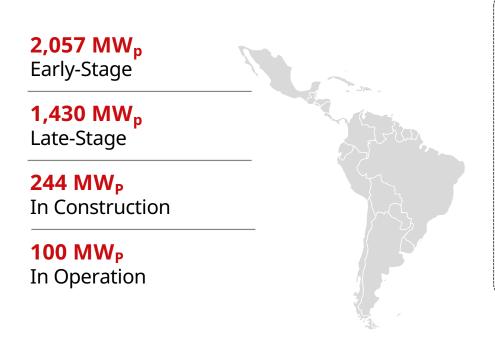
- The above COD target schedule is not to be construed as company guidance, but rather as an indication of visibility into demand for solar power plants across major markets. Not all the projects in our pipeline will reach COD.
- As a general rule of thumb, 80-90% of our late-stage projects are expected to reach COD, approximately 40-60% of mid-stage and 20-70% of early-stage projects can be expected to reach COD, depending on specific situation.

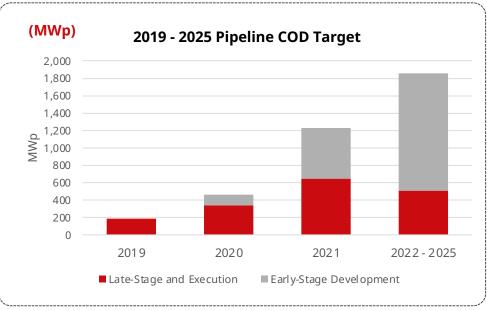
### **Projects Update**

Completed the Sale of 266 MWp/200 MWac Rambler to Duke Energy Renewables

Source: Canadian Solar Inc.

## Strong competitive position in key energy markets - LATAM





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### **Projects Update**

- Cafayate achieved COD as of July 15<sup>th</sup>, 2019.
- Lo Miranda (PMGD) achieved COD as of October 29<sup>th</sup>, 2019.
- ❖ Jaiba Expansion I 51.12MWp Project was awarded in the Sixth Brazilian Federal Energy Auction.
- ❖ Jaiba Expansion II 127 MWp Project was awarded in CEMIG Auction.
- Ciranda and Lavras Expansion Projects were awarded in COPEL Auction.
- Salgueiro declared NTP stage during October 2019.
- Gameleira and Luiz Gonzaga Projects were awarded in the A-6 Brazilian Federal Energy Auction.



## Strong competitive position in key energy markets - EMEA

**1,910 MW**<sub>p</sub> Early- Mid-Stage

**223 MW**<sub>P</sub> Late-Stage

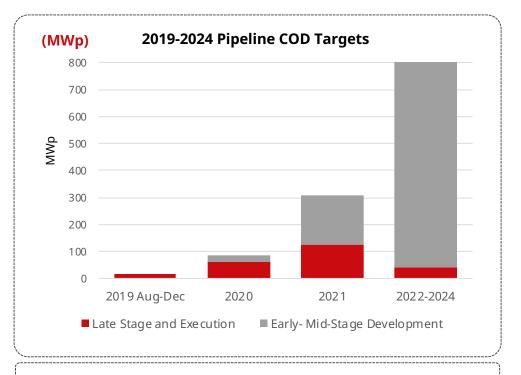
**18 MW**<sub>p</sub> In Construction

**3 MW**<sub>p</sub> In Operation



### **Recently Confirmed Projects**(1):

Ta'anach	141.72	MWp
Nacham	12.77	MWp
Beit Nekufa	11.42	MWp
Zlafon	8.96	MWp



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#### **Projects Update**

- Tordesillas (300 MW, Spain) completed land acquisition
- Gesi (18 MW, Italy) plant connected and waiting for activation
- Launched connection request for Avalon Quintos (200 MW, Spain) project in Andalusia
- First batch of Trapani and Renelectron (18 MW, Italy) portfolio authorized



# Strong competitive position in key energy markets - APAC (1)

**53 MW**<sub>p</sub>

Early- Mid-Stage

**276 MW<sub>p</sub>** 

Late-Stage

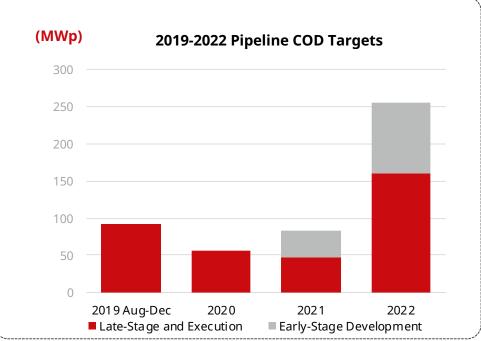
**53 MW**<sub>P</sub>

In Construction

143 MW<sub>P</sub>

In Operation





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#### Projects Update

- Project Ishikari and Kejonuma achieved COD in July 2019.
- 30MWp Okayama Shinyubara successfully participated in Japan's 5<sup>th</sup> Auction.
- 329 MWp total pipeline are under late-stage development.
- Start construction of 2MWp Project in Taiwan in August
- 1MWp RTB with tariff awarded in Korea

(1) Includes Japan and SEA. Source: Canadian Solar Inc.



### **Strong competitive position in key energy markets - APAC (Australia)**

#### 620 MW<sub>p</sub>

Early- Mid-Stage

#### **522 MW<sub>p</sub>**

Late-Stage

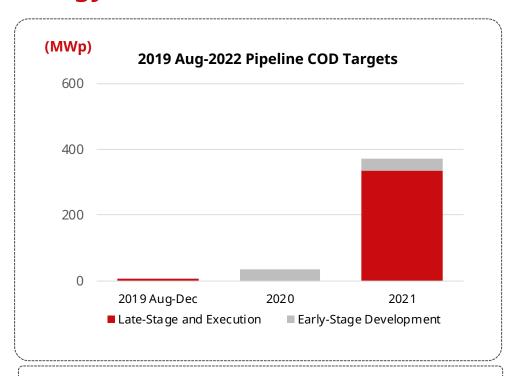
#### 0 MW<sub>P</sub>

In Construction

#### **59 MW**<sub>P</sub>

In Operation





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#### Projects Update

- Oakey 2 Solar Farm was sold at financial close.
- Normanton, Oakey 1 and Longreach are currently in operation.
- Manum 1 is under construction and has achieved COD under the PPA.
- 189MW Suntop 1 has executed its connection agreement.
- 144MWp Gunnedah has executed its connection agreement.



## **Strategic Direction**

Grow Our Pipeline in Attractive Markets	Focus on markets where partial asset retention and control provide the best long-term value	
Maintain Control of the Value Chain	Partner with low cost of capital entities to build a series of special purpose vehicles to drop our solar assets once COD is reached  Maintain enough ownership of the vehicles (10-15%) to keep control of the asset over the life-cycle to maximize return for Canadian Solar shareholders	
Maximize Synergies Across the Value Chain	Optimize development capital cycle  Manage EPC and leverage scale to implement centralized procurement  Secure Asset Management and O&M contracts	
Build Long-Term Recurring Revenue Stream	Generate predictable cash flows from power sales, O&M and asset management fees to supplement revenue from sale of power plants  Gradually grow asset base through partial ownership, O&M and asset management contracts	

Our goal is to optimize the business model to maximize value to Canadian Solar shareholders over the long term.



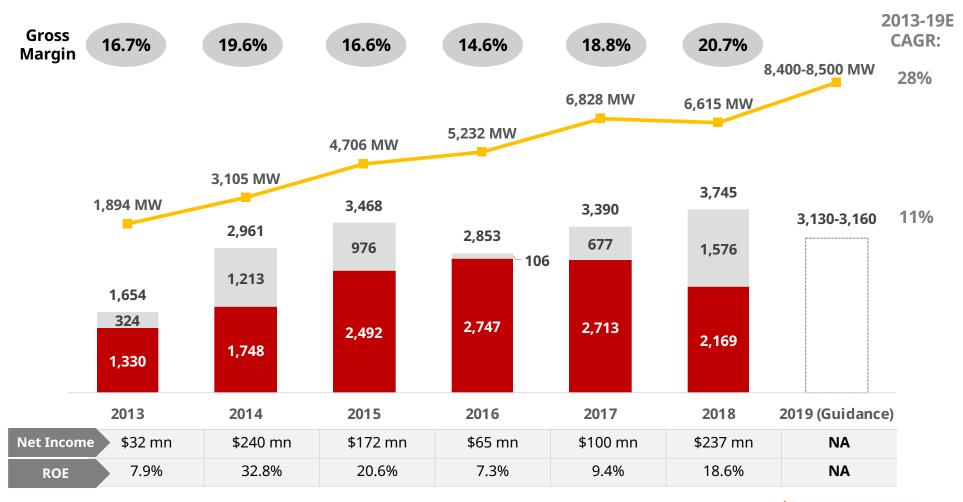


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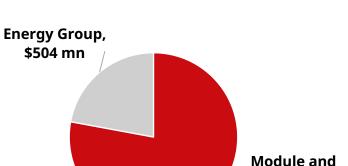
# Resilient business model combining manufacturing operations and downstream total solutions consistently profitable over past 7 years

#### Total Revenue (USD millions) and Module Shipments (MW)

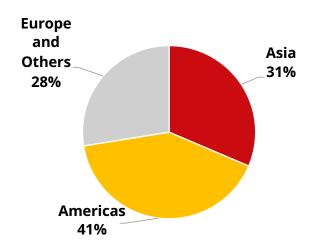


## **Consolidated Income Statement Summary**

USD millions except per share data	3Q19	vs. 2Q19	vs. 3Q18	9M19	vs. 9M18
Net revenues	760	-27%	-1%	2,281	-20%
Cost of revenues	561	-34%	-1%	1,792	-23%
Gross profit	199	9%	-1%	489	-3%
Operating expenses	119	-3%	14%	342	24%
Operating income	80	32%	-16%	147	-35%
Other (expenses)/income	2	NM	NM	21	NM
Depreciation and amortization	37	-7%	14%	114	18%
EBITDA (non-GAAP) <sup>(1)</sup>	119	-8%	-14%	282	-13%
Net income attributable to Canadian Solar Inc.	58	-7%	-12%	104	-17%
Diluted EPS	0.96	-8%	-12%	1.71	-18%
Gross margin	26.2%	855 bp	8 bp	21.4%	372 bp
EBITDA* margin	15.7%	316 bp	-234 bp	12.4%	96 bp
Net margin	7.7%	163 bp	-99 bp	4.6%	14 bp
Return on equity (TTM)	15.8%	-115 bp	23 bp	15.8%	23 bp



9M19



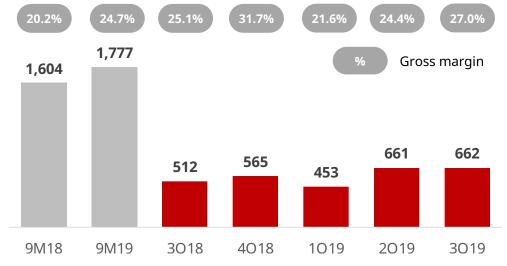
<sup>(1)</sup> EBITDA calculated as operating income after loss/gain on change in fair value of derivatives, FX gain/loss, investment income/loss, and income from minority shareholdings; then adding back depreciation and amortization. For a reconciliation of GAAP to non-GAAP results, see accompanying table "GAAP to Non-GAAP Reconciliation" on slide 54.

System Solutions, \$1,777 mn

#### **Modules and System Solutions Summary Financials**

USD millions except shipment data	3 <b>Q</b> 19	vs. 2Q19	vs. 3Q18	9M19	vs. 9M18
Total shipments (MW)	2,387	11%	50%	6,105	31%
Shipments recognized as revenues (MW)	2,156	-9%	42%	5,955	26%
Revenues	662	0%	29%	1,777	11%
Gross profit	179	11%	39%	438	36%
Operating profit	84	28%	65%	170	115%

#### **Module and System Solutions Revenues (USD million)**



#### (1) All values include the effect of inter-segment elimination.

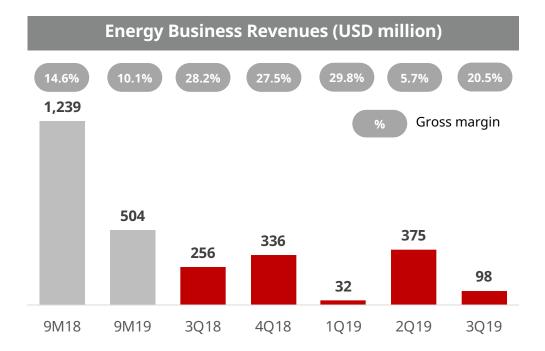
#### **Key highlights**

- Total module shipments grew by 11% qoq and 50% yoy, driven by strong demand from Brazil, the US, Europe and South East Asia.
- Canadian Solar continued to maintain a leading position in high ASP and captive markets, driving gross margin expansion. ASPs remained stable while our cost of production continued to decline.
- Manufacturing operations ran at full capacity in Q3.



#### **Energy Business Summary Financials**

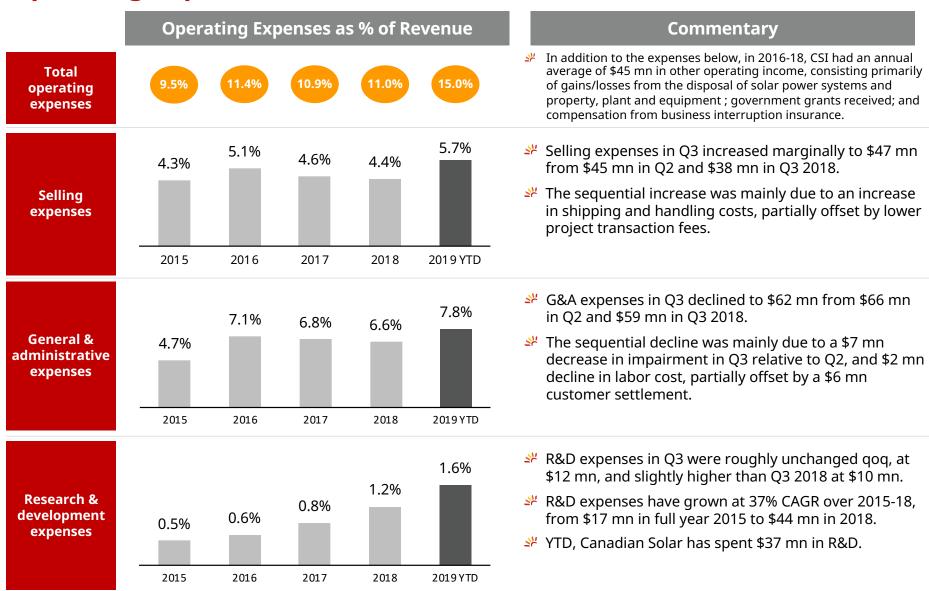
USD millions	3Q19	vs. 2Q19	vs. 3Q18	9M19	vs. 9M18
Revenues	98	-74%	-62%	504	-59%
Gross profit	20	-7%	-72%	51	-72%
Operating profit	-4	NA	NA	-22	NA



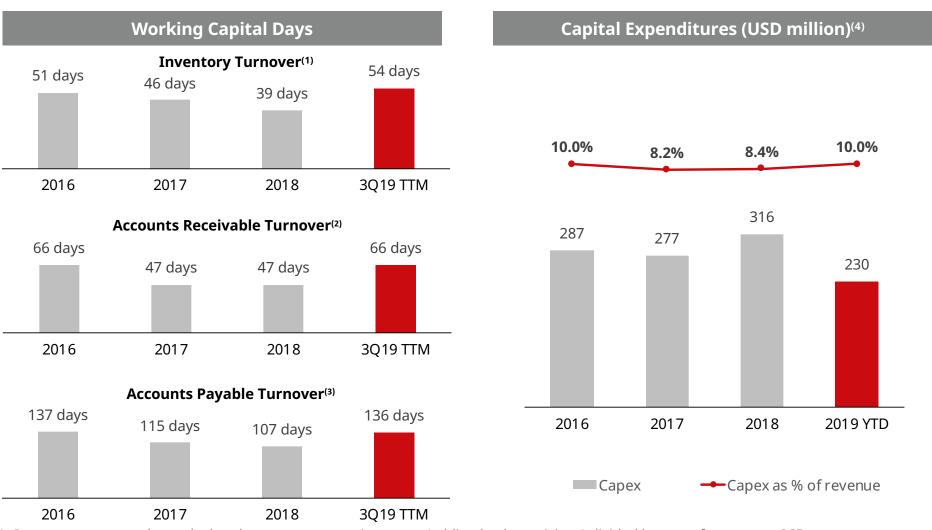
#### **Key highlights**

- Lower revenues in Q3 was mainly driven by the delayed closing of project sales in Japan, which are expected to be completed in Q4 2019 and Q1 2020.
- Q3 projects sold included the sale of the 266 MWp Rambler project in the US and the sale of 80% interest in the 172 MWp Lavras project in Brazil, both sales were preconstruction.
- Despite lower revenues, Q3 gross margin expanded due to greater share of NTP sales which has a higher gross margin % contribution.

#### **Operating expenses**



## Disciplined working capital management, disciplined and balanced capex

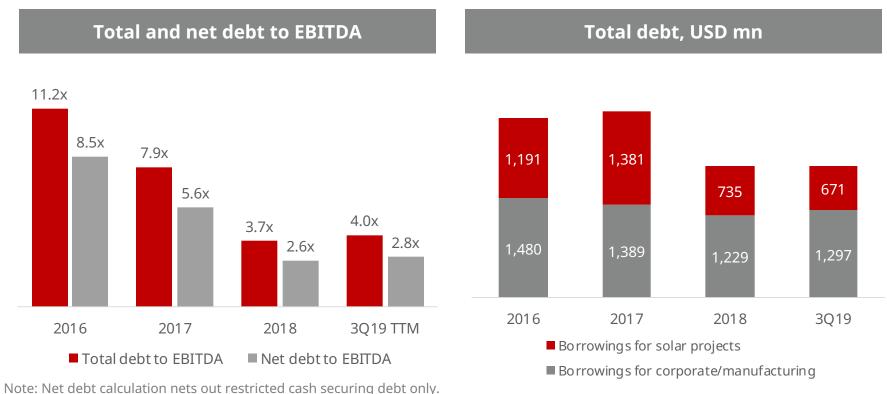


- 1) Inventory turnover days calculated as average gross inventory (adding back provisions) divided by cost of revenues x365
- 2) Account receivables days calculated as average gross accounts receivable (adding back bad debt allowance) divided by total revenues x365.
- 3) Accounts payable days calculated as average accounts payable divided by cost of revenues x365.
- 4) Capex for PP&E only, excluding capex related to project development.



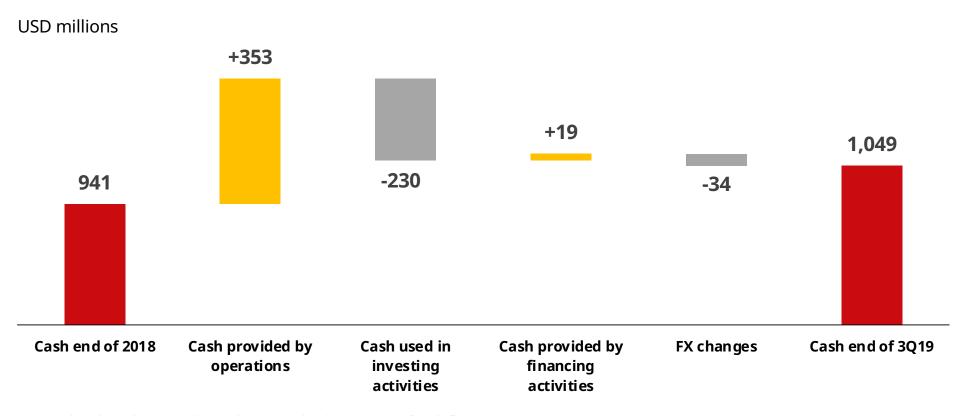
## Canadian Solar has significantly deleveraged its balance sheet in the last several quarters

- Total and net debt to EBITDA now at 4.0x and 2.8x respectively.
- The ratios would be approximately 1x lower excluding project level nonrecourse debt.
- Deleverage mainly driven by growth in EBITDA and reduction in project debt associated with project sales.



# We have maintained a strong cash position while continuing to invest in the long-term success of our business

#### Cash flow movement from FY18 year-end



Note: Values based on Canadian Solar's unaudited statement of cash flows.

## Attractive valuation supported by resilient financial performance

Total Debt and Cash Breakdown											
	4Q18	1Q19	2Q19	3Q19							
Short-term borrowings	1,028	1,071	1,080	1,056							
Long-term borrowings on project assets - current	266	280	177	262							
Convertible notes - current	127	0	0	0							
Capital leases - current	38	38	39	31							
Long-term borrowings	394	434	463	526							
Financing liabilities – non-current	78	79	78	76							
Capital leases - non-current	34	26	22	17							
Total debt	1,965	1,928	1,859	1,968							
Cash and equivalents	444	370	438	526							
Restricted cash - current:	481	516	526	515							
Of which to secure debt:	134	67	75	82							
Total cash (for EV calculation)	578	437	513	608							
Net debt	1,386	1,491	1,345	1,360							

EBITDA Calculation										
	4Q18	1Q19	2Q19	3Q19	TTM					
Total revenue	901	485	1,036	760	3,182					
- COGS	-630	-378	-854	-561	-2,423					
Gross profit	271	107	182	199	759					
- Operating expenses	-135	-101	-122	-119	-477					
Operating profit	136	6	60	80	282					
-/+ Other expenses/income	35	-11	30	2	56					
+ Depreciation & amortization	32	38	40	37	147					
EBITDA (non-GAAP)	203	33	130	119	485					
Impairments	41	0	14	14	69					
Adjusted EBITDA (non-GAAP)*	244	33	144	133	554					

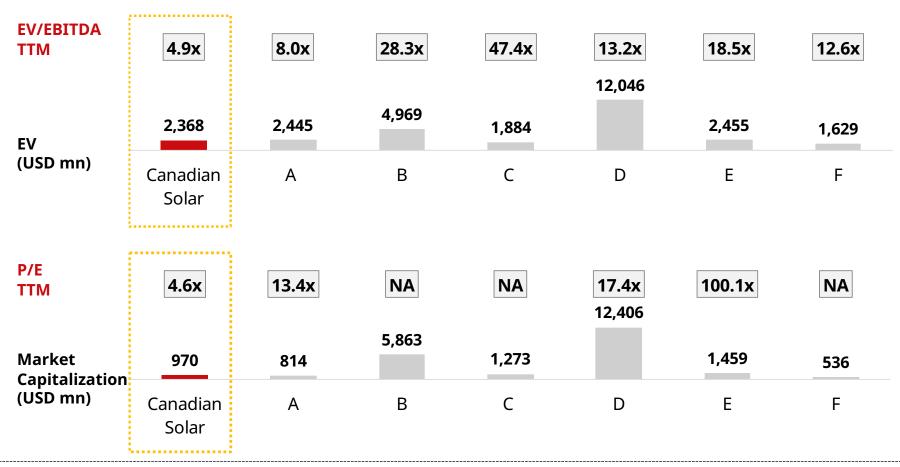


Market Capitalization \$970 mn

Total Debt \$1,968 mn Total Cash \$608 mn Non-Controlling Interests \$38 mn Enterprise Value \$2,368 mn EV/EBITDA TTM 4.9x/4.3x\*

- 1. Source: Factset, company filings.
- 2. Prices as at November 27, 2019 market close.
- 3. All Canadian Solar financials are actual reported values. For a reconciliation of GAAP to non-GAAP results, see accompanying table "GAAP to Non-GAAP Reconciliation" on slide 54.

## Attractive valuation supported by resilient financial performance



- The above relative valuation analysis is intended for illustration purposes only, investors are encouraged to do their own due diligence based on their own analysis of publicly available financial information.
- The rationale for Canadian Solar EV/EBITDA calculation can be reviewed on slide 48. EV/EBITDA and P/E for close peers is based on Factset database. We have not independently verified the accuracy of Factset's data, but believe it to be reasonable.
- 1. NA: Not applicable due to negative earnings.

## Experienced and strategically prudent management team and board with track record of execution

CA	Ecution	
	<b>Dr. Shawn Qu</b> Chairman and CEO	<ul> <li>Founded Canadian Solar in 2001, firmly establishing 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>
	<b>Yan Zhuang</b> Acting CEO, SVP and Chief Commercial Officer	<ul> <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>
	<b>Dr. Huifeng Chang</b> SVP and Chief Financial Officer	<ul> <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>
15	<b>Guangchun Zhang</b> SVP and Chief Operating Officer	<ul> <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>
	<b>Ismael Guerrero</b> CVP and President of Energy Group	<ul> <li>President, Head of Origination and COO at TerraForm Global</li> <li>Vice President of Global Projects at Canadian Solar</li> <li>Director of Operations for Asia at the Global Sustainable Fund</li> </ul>
9	<b>Jianyi Zhang</b> SVP and Chief Compliance Officer	<ul> <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>
	<b>Dr. Guoqiang Xing</b> SVP and Chief Technology Officer	<ul> <li>Chief Technology Officer of Hareon Solar</li> <li>R&amp;D Director of JA Solar</li> <li>R&amp;D Director at several semiconductor companies</li> </ul>
S	Robert McDermott Chair of the Nominating and Corporate Governance, and member of Audit and Compensation Committees	<ul> <li>Partner with McMillan LLP, a business and commercial law firm</li> <li>Director and senior officer of Boliden Ltd.</li> </ul>
enced it Directoi	<b>Dr. Harry E. Ruda</b> Chair of Technology, and member of the Audit, Nominating and Governance, and Compensation Committees	<ul> <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>
Experienced Independent Directors	Andrew Wong Chair of the Compensation, and member of the Audit, Nominating and Governance Committees	<ul> <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 Shenzen Yantian Port (Group) Co. Ltd.</li> </ul>
Ħ	Arthur Wong Chair of the Audit Committee, and member of Nominating and Governance, and Compensation Committees	<ul> <li>Independent director and chair of the audit committee of China Automotive Systems, Inc., Daqo New Energy Corp., and China Maple Leaf Educational Systems Limited</li> <li>Various positions with Deloitte Touche Tohmatsu (Deloitte) in Hong Kong, San Jose and Beijing</li> <li>Chief Financial Officer at a variety of companies</li> </ul>



## **Guidance as of November 12, 2019**

	Q3 2019	Q4 2019E	FY2
Module Shipments	2,387 MW	2.3 GW to 2.4 GW	6,615
Revenue <sup>(1)</sup>	\$759.9 mn	\$850 mn to \$880 mn	\$3.7
Gross Margin <sup>(1)</sup>	26.2%	19% to 21%	N

FY2018	FY2019E	ΥοΥ Δ%
6,615 MW	8.4 GW to 8.5 GW	+27.7%
\$3.74 bn	\$3.13 bn to \$3.16 bn	-15.9%
NA	NA	NA

<sup>(1)</sup> Includes MSS and Energy businesses.

## **Consolidated Income Statement**

USD millions except per share data	2017	2018	9M18	9M19	9М уоу	3Q18	4Q18	1Q19	2Q19	3Q19	3Q qoq	3Q yoy
Net Revenue	3,390	3,745	2,843	2,281	-20%	768	901	485	1,036	760	-27%	-1%
Cost of revenues	-2,753	-2,969	-2,340	-1,792	-23%	-568	-630	-377	-854	-561	-34%	-1%
Gross profit	638	775	504	489	-3%	200	271	107	183	199	9%	-1%
Selling expenses	-156	-165	-121	-130	8%	-38	-44	-38	-45	-47	4%	22%
General and administrative expenses	-231	-245	-164	-179	9%	-59	-81	-51	-66	-61	-7%	5%
Research and development expenses	-29	-44	-29	-37	28%	-10	-15	-13	-12	-12	-5%	14%
Other operating income, net	48	45	38	4		3	6	2	1	1		
Total operating expenses, net	-368	-410	-276	-342	24%	-104	-135	-101	-122	-119	-3%	14%
Income from operations	269	365	228	147	-35%	96	137	7	61	80	32%	-16%
Net interest expense	-107	-95	-74	-53		-24	-21	-20	-16	-17		
Gain (loss) on change in fair value of derivatives	0	-19	-12	-16		-9	-7	-1	-12	-2		
Foreign exchange gain (loss)	-23	7	-1	7		10	7	-13	16	3		
Investment income (loss)	-4	41	6	2		7	35	1	2	-1		
Income tax benefit (expense)	-41	-62	-25	-17		-13	-37	8	-14	-10		
Equity in earnings (loss) of unconsolidated investees	9	6	6	28		3	0	2	24	2		
Net income	103	242	128	99		68	114	-17	61	55		
Less: net income attributable to non- controlling interests	3	5	3	(5)		2	2	-	(2)	(3)		
Net income attributable to Canadian Solar Inc.	100	237	125	104	-17%	66	112	-17	63	58	-7%	-12%
Earnings per share - basis	1.71	4.02	2.13	1.74		1.14	1.89	-0.29	1.05	0.97		
Earnings per share – diluted	1.69	3.88	2.08	1.71	-18%	1.09	1.81	-0.29	1.04	0.96	-8%	-12%

## **Summary Balance Sheet**

USD millions	3Q17	4Q17	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19
Cash and cash equivalents	615	562	567	452	520	444	370	438	526
Restricted cash - current	529	618	613	536	460	481	516	526	515
Accounts receivable	457	358	354	370	323	498	389	455	449
Inventories	302	346	414	336	322	262	385	338	413
Project assets - current	1,659	1,523	959	1,191	1,187	934	920	690	910
Other current assets	643	678	506	511	525	455	510	448	532
Total current assets	4,205	4,085	3,413	3,396	3,337	3,074	3,090	2,895	3,345
Restricted cash - non-current	11	11	11	3	16	16	26	17	7
Property, plant and equipment	675	747	791	797	863	885	933	958	996
Net intangible assets and goodwill	16	17	15	16	16	16	20	19	24
Project assets - non-current	148	148	166	92	117	352	393	404	238
Solar power systems	67	64	63	59	56	55	60	57	53
Investments in affiliates	402	414	415	411	403	126	128	153	150
Other non-current assets	524	404	426	419	396	369	423	536	495
Total non-current assets	1,843	1,805	1,887	1,797	1,867	1,819	1,983	2,144	1,963
TOTAL ASSETS	6,048	5,890	5,300	5,193	5,204	4,893	5,073	5,039	5,308
Short-term borrowings	2,140	1,958	1,858	2,000	1,878	1,028	1,071	1,080	1,056
Long-term borrowings on project assets-current	0	0	0	0	0	266	280	177	262
Accounts and notes payable	1,057	976	914	815	857	749	934	926	1,006
Other payables	296	315	295	303	322	408	380	440	453
Tax equity liabilities	419	408	155	154	164	158	158	50	53
Other current liabilities	500	451	398	391	424	339	241	258	250
Total current liabilities	4,412	4,108	3,620	3,663	3,645	2,948	3,064	2,931	3,080
Long-term borrowings	318	404	328	221	120	394	434	463	526
Convertible notes	126	126	0	0	0	0	0	0	0
Other non-current liabilities	201	192	208	206	237	278	302	324	336
Total non-current liabilities	645	722	536	427	357	672	736	787	862
TOTAL LIABILITIES	5,057	4,830	4,156	4,090	4,002	3,620	3,800	3,718	3,942
Common shares	702	702	702	703	703	703	704	703	704
Retained earnings	322	384	428	444	510	622	605	668	726
Other equity	-58	-54	-26	-82	-52	-100	-79	-92	-103
Total Canadian Solar Inc. shareholders' equity	966	1,032	1,104	1,065	1,161	1,225	1,230	1,279	1,327
Non-controlling interests	25	28	40	38	41	48	43	42	39
TOTAL EQUITY	991	1,060	1,144	1,103	1,202	1,273	1,273	1,321	1,366

#### **GAAP to Non-GAAP Reconciliation**

In USD millions	9M18	4Q18	1Q19	2Q19	3Q19
GAAP net income	128	114	-17	60	55
Add back:					
Income tax benefit (expense)	25	37	-8	14	10
Net interest expense	75	21	20	16	17
Non-GAAP EBIT	228	172	-5	90	82
Add back:					
Depreciation & amortization	97	32	38	40	37
Non-GAAP EBITDA	325	204	33	130	119
Add back:					
Impairments	5	41	0	14	14
Non-GAAP adjusted EBITDA	330	244	33	144	133

- To supplement financial disclosures presented in accordance with GAAP, the Company uses non-GAAP measures which are adjusted from the most comparable GAAP measures for certain items as described herein.
- The Company presents non-GAAP values for EBITDA so that readers can better understand the underlying operating performance of the business, excluding the effect of non-cash costs such as depreciation, amortization and impairments.
- The non-GAAP numbers are not measures of financial performance under U.S. GAAP, and should not be considered in isolation or as an alternative to other measures determined in accordance with GAAP. These non-GAAP measures may differ from non-GAAP measures used by other companies, and therefore their comparability may be limited.





**Thank You** 

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