





# Investor Presentation

Third Quarter 2019 Update  
November 14, 2019

CSIQ NASDAQ Listed



# Safe Harbor Statement

-  This presentation has been prepared by the Company solely to facilitate the understanding of the Company's business model and growth strategy. The information contained in this presentation has not been independently verified. No representation, warranty or undertaking, express or implied, is made as to, and no reliance should be placed on, the fairness, accuracy, completeness or correctness of the information or the opinions contained herein. None of the Company or any of its affiliates, advisers or representatives will be liable (in negligence or otherwise) for any loss howsoever arising from any use of this presentation or its contents or otherwise arising in connection with the presentation.
-  This presentation contains forward-looking statements and management may make additional forward-looking statements in response to your questions. Such written and oral disclosures are made pursuant to the Safe Harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. These forward looking statements include descriptions regarding the intent, belief or current expectations of the Company or its officers with respect to its future performance, consolidated results of operations and financial condition. These statements can be identified by the use of words such as "expects," "plans," "will," "estimates," "projects," or words of similar meaning. Such forward-looking statements are not guarantees of future performance and involve risks and uncertainties. Actual results may differ materially from expectations implied by these forward-looking statements as a result of various factors and assumptions. Although we believe our expectations expressed in such forward looking statements are reasonable, we cannot assure you that they will be realized, and therefore we refer you to a more detailed discussion of the risks and uncertainties contained in the Company's annual report on Form 20-F as well as other documents filed with the Securities & Exchange Commission. In addition, these forward looking statements are made as of the current date, and the Company does not undertake to update forward-looking statements to reflect future events or circumstances, unless otherwise required by law.



## Table of contents

- 1 **Company Overview**
- 2 The Market Opportunity
- 3 Module and Systems Solutions
- 4 Energy Business
- 5 Financial Highlights

# Company Description

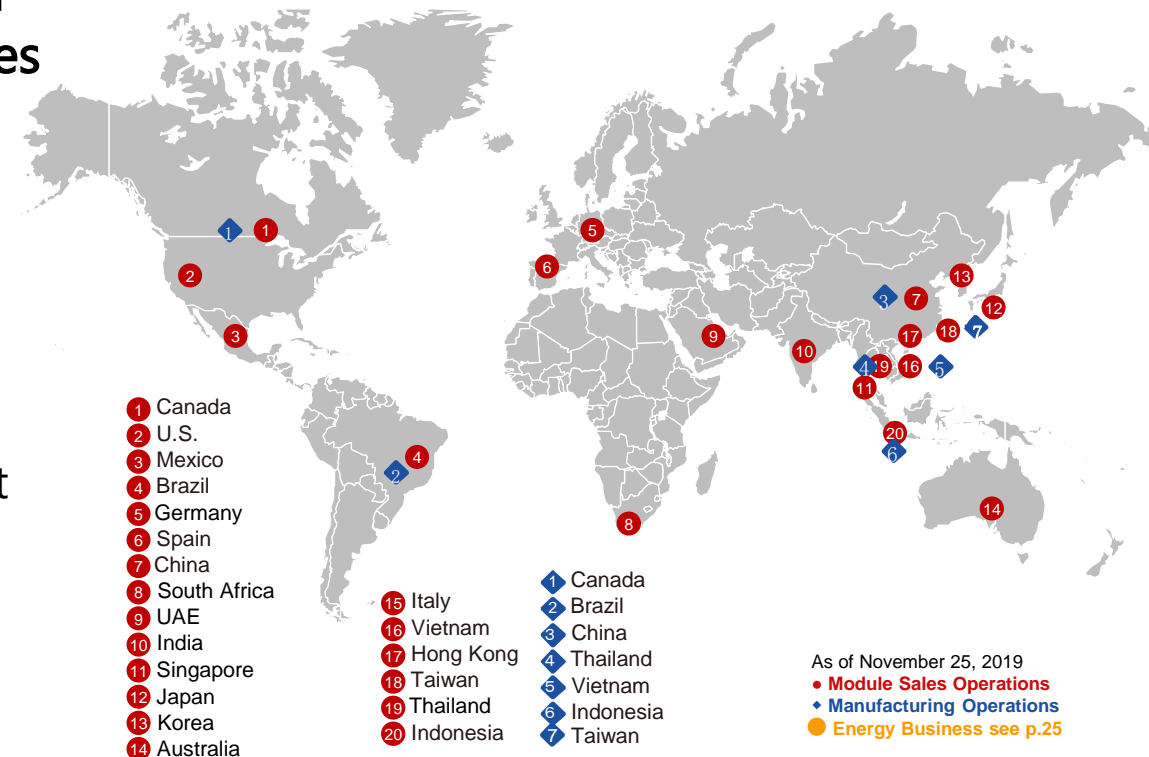
☀️ **Leading solar module manufacturer and utility-scale solar developer with one of the world's largest solar project pipelines**

- ❖ 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

## Global Footprint



## 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

- ☀ Levered to 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





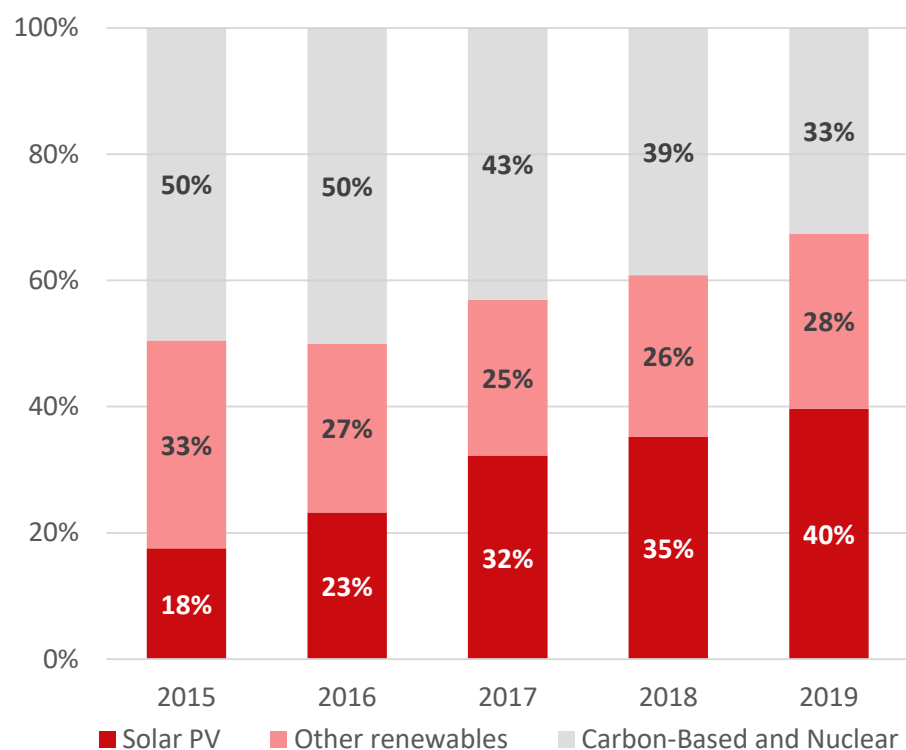
## Table of Contents

- 1 Company Overview
- 2 The Market Opportunity**
- 3 Module and Systems Solutions
- 4 Energy Business
- 5 Financial Highlights

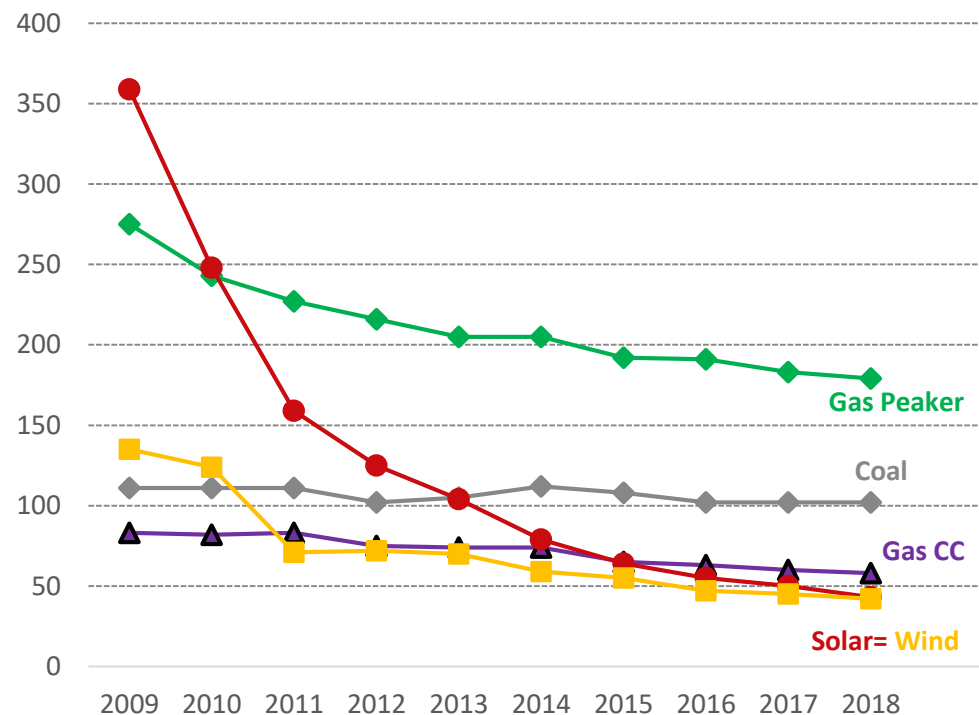
# Solar energy has already become mainstream...

- ☀️ 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)



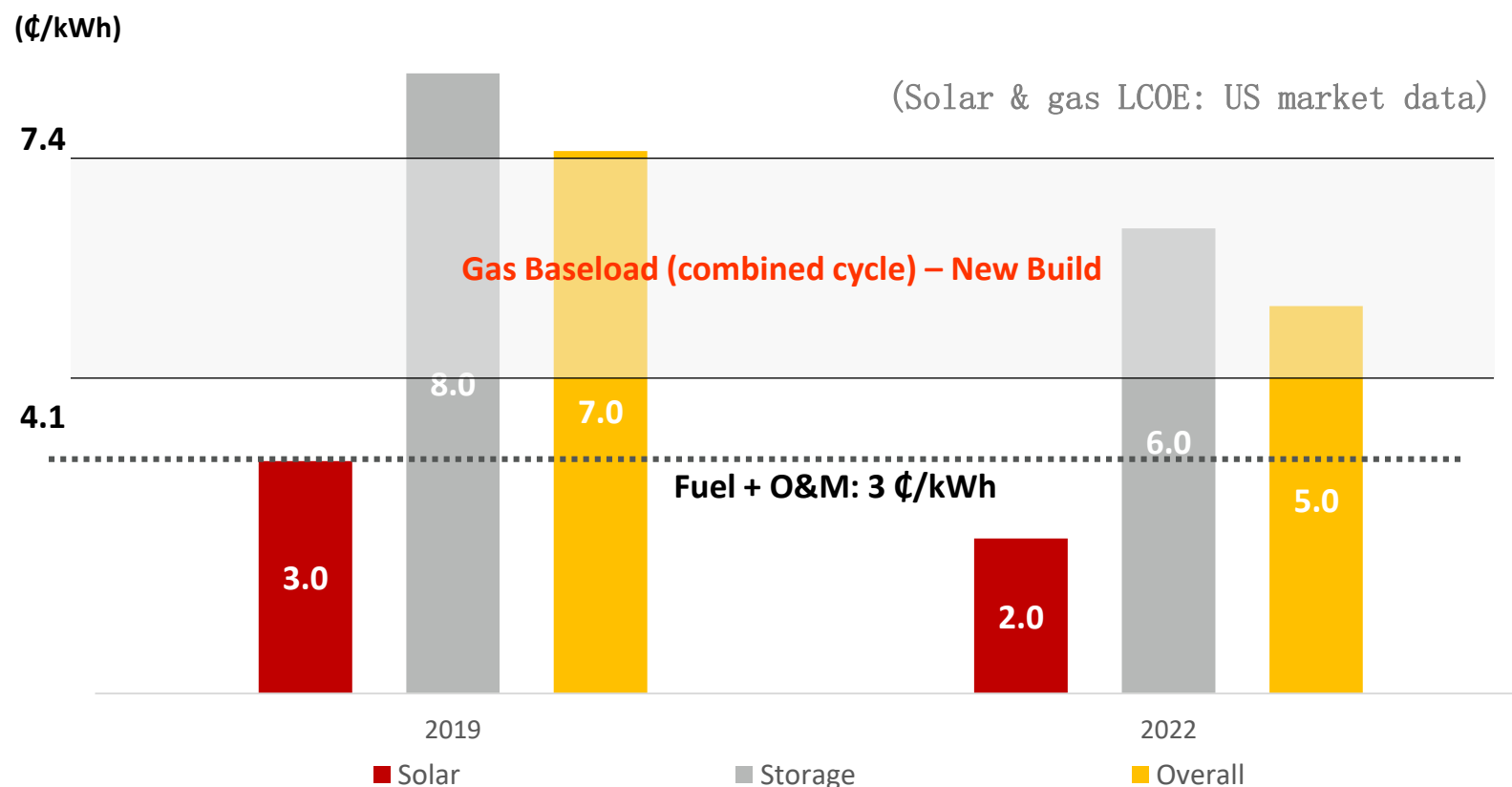
## Mean Levelized Cost of Electricity (\$/MWh)



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.

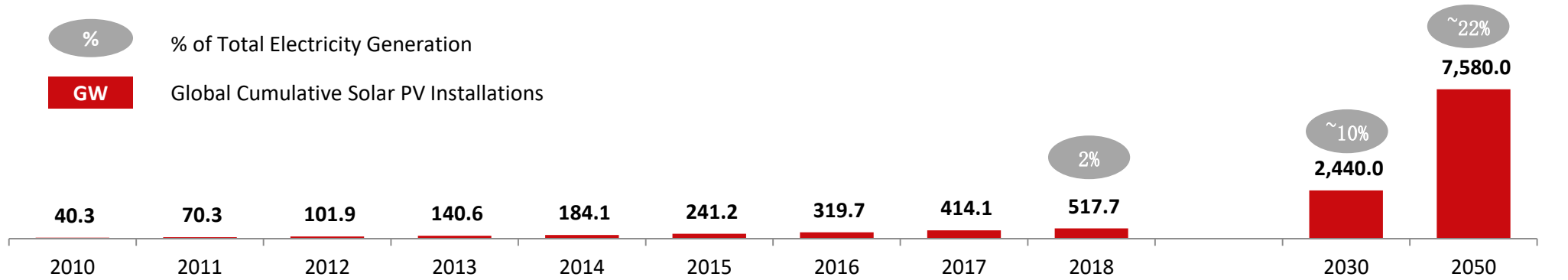




# Key energy markets remain underpenetrated providing long-term visibility into the demand environment for our business

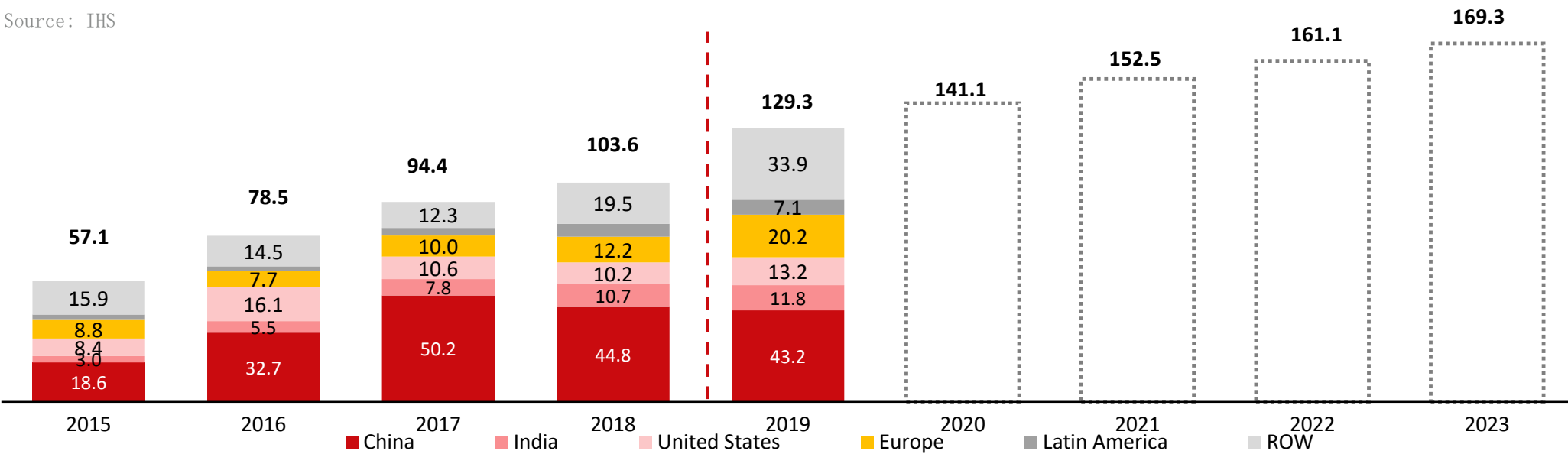
Solar energy will grow from 2% of global electricity generation today to around 10% by 2030

Source: IHS, BNEF.



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

Source: IHS



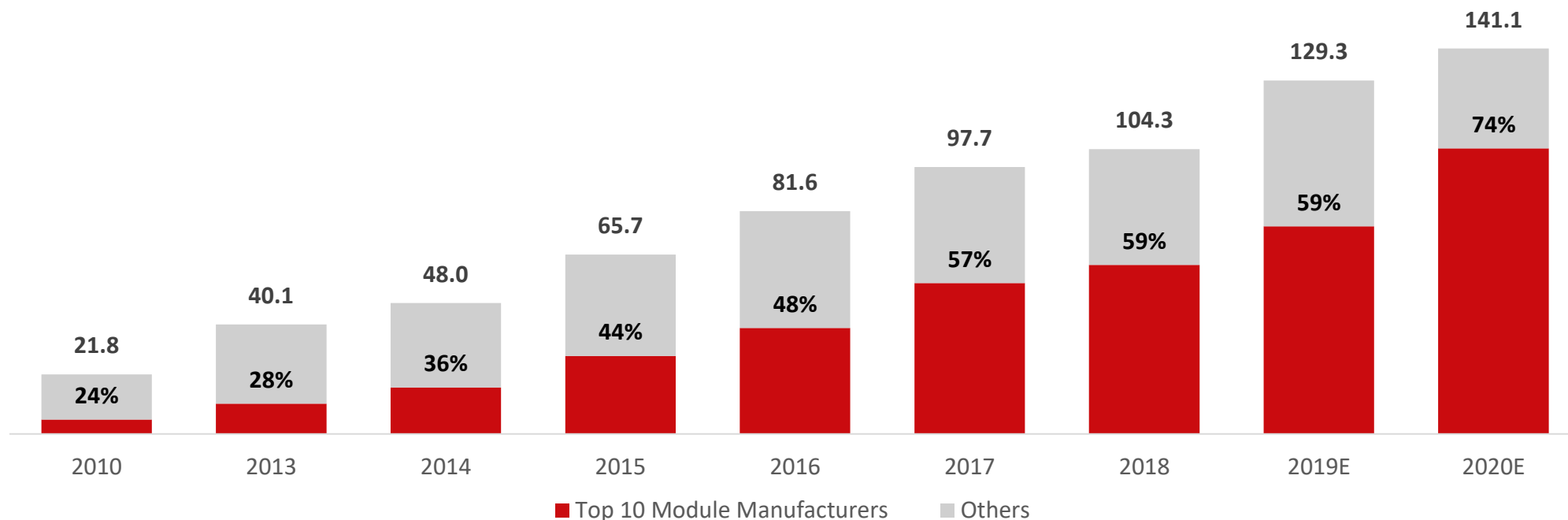
Disclaimer: Industry forecasts in the above charts and elsewhere on this presentation are provided by third-party industry analysts. There can be no assurance that any such forecasts are accurate or that they will be achieved. Although we have not independently verified the accuracy of these forecasts,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

# Industry consolidation is shifting the basis of competition to non-price 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.

1. 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.



## Table of Contents

- 1 Company Overview
- 2 The Market Opportunity
- 3 Module and Systems Solutions**
- 4 Energy Business
- 5 Financial Highlights



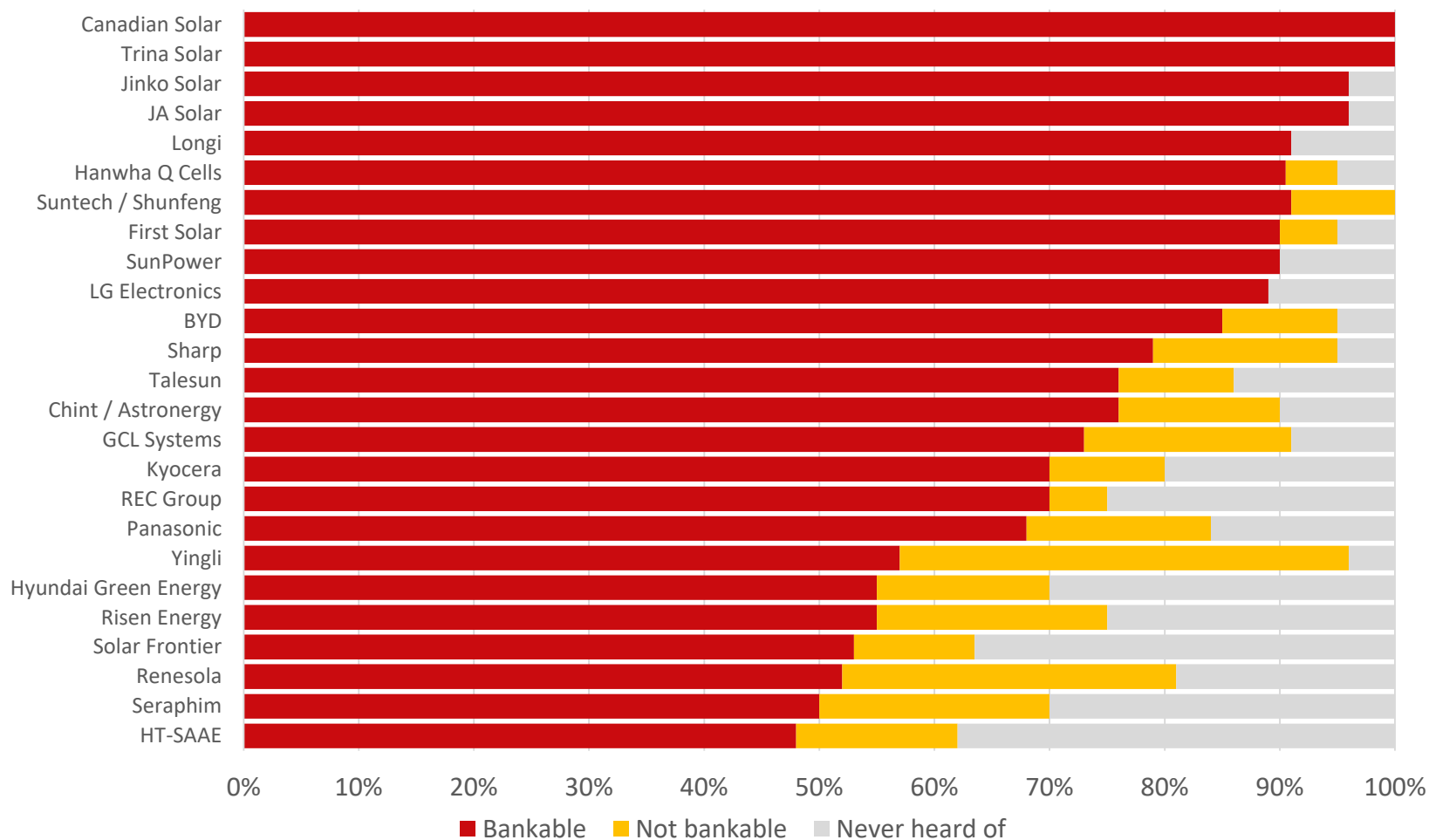
## Leading module and total solutions provider with a track record of delivering high-quality products and services in over 160 countries

- 🌅 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.

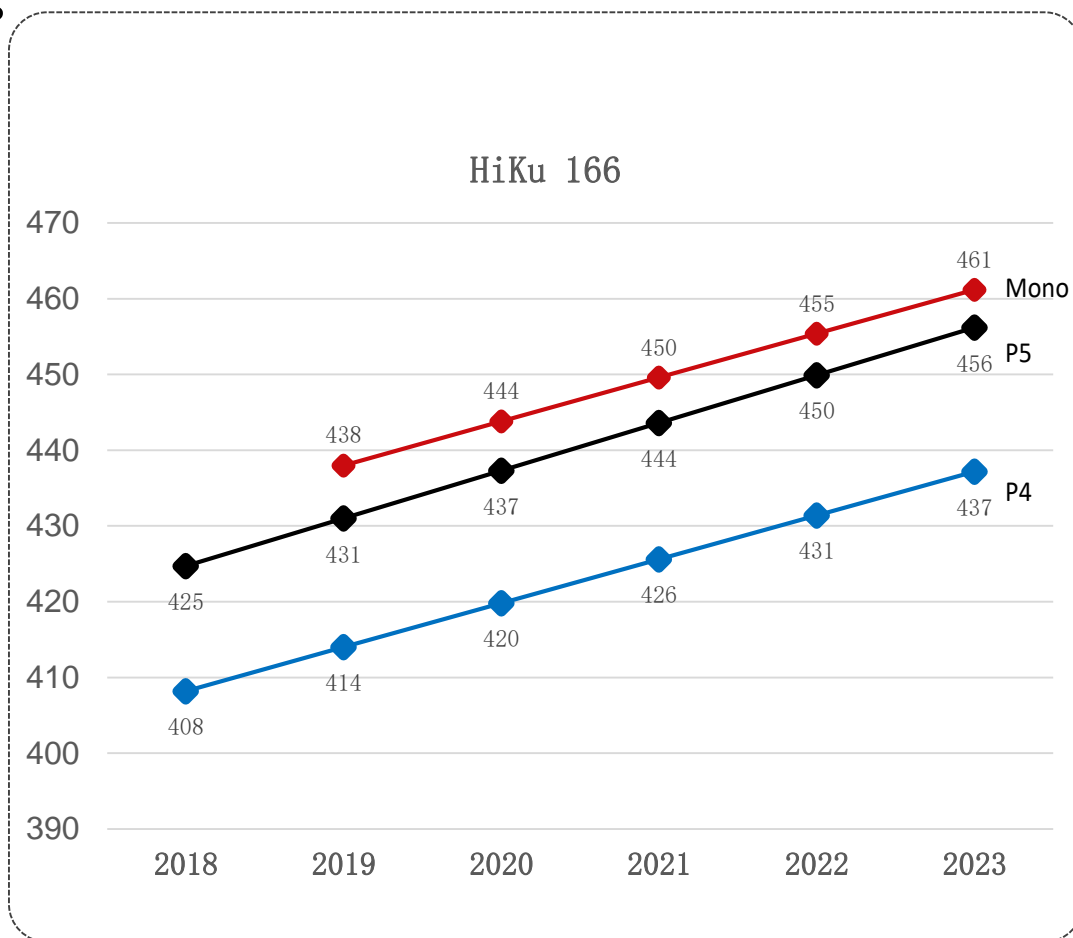
# Leader in solar cell and module technologies, with homegrown innovation driving product differentiation

☀ 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

☀ 100% capacity converted to PERC and half-cut cells

☀ ~80% capacity in MBB cells

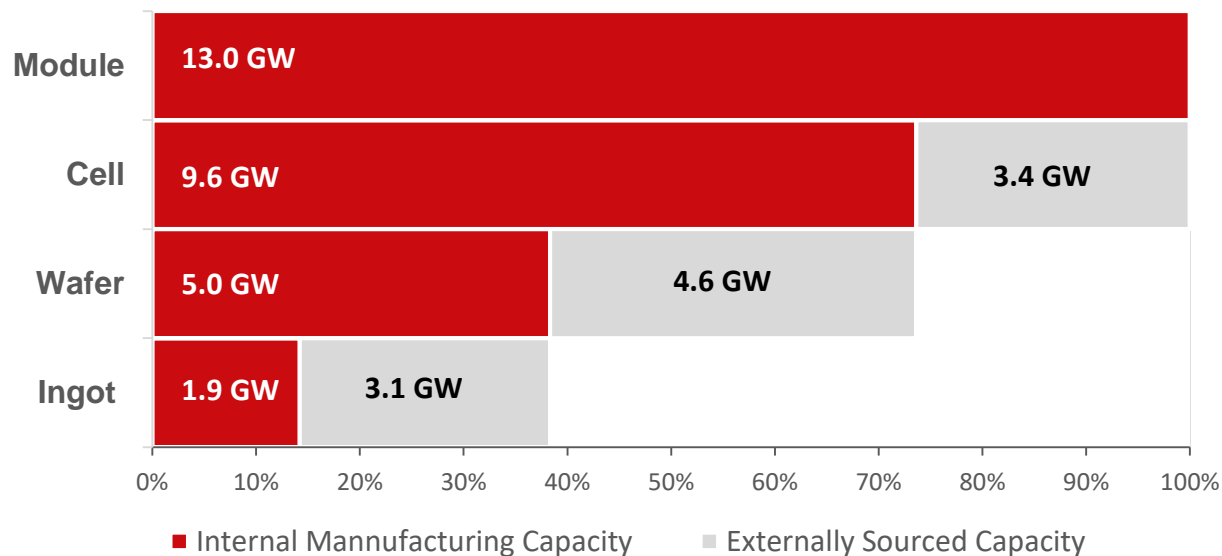




## Technology-agnostic cell and module manufacturing capacity

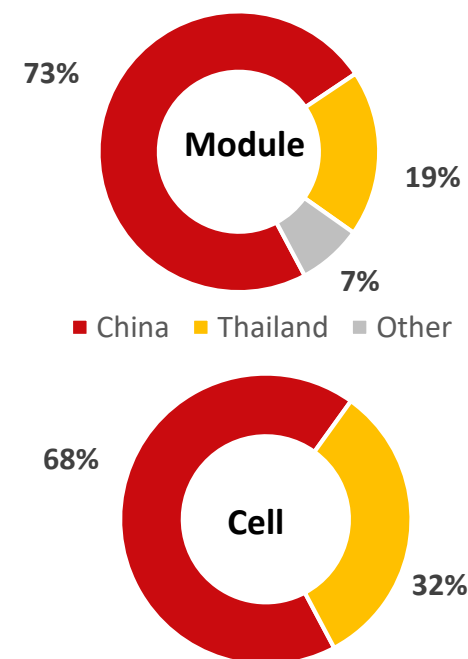
- ☀ Our cell capacity is convertible to produce mono- or multi- with low or no additional capex requirements
- ☀ During 2018/19, gross margin of multi-product has exceeded that of mono-product by 400 basis points
- ☀ Inverted pyramid manufacturing capacity frees resources to focus on downstream businesses

Manufacturing Capacity – 2019 Year End




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

Capacity by Geography




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.

					
2017-2019YTD <i>Average</i>	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.

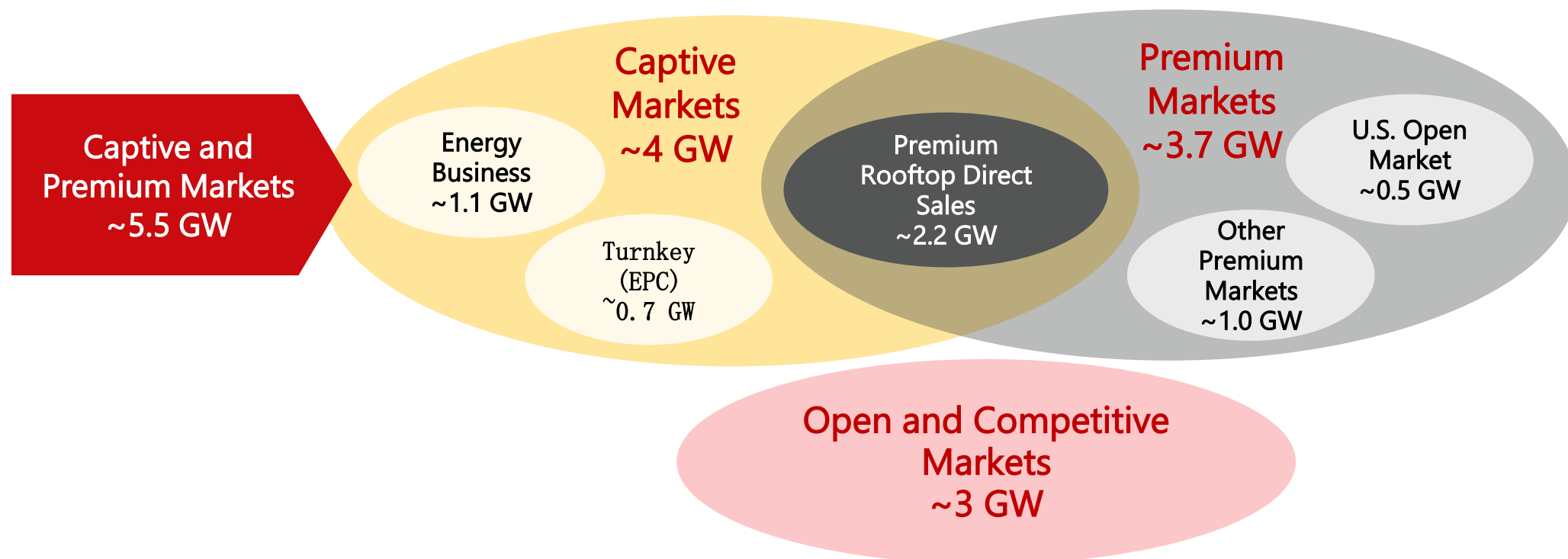
(1) CSIQ inventory and receivables are gross amounts i.e. adding back provisions and bad debt allowances, respectively. Using net amounts would reduce average inventory and receivable days.

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

🌅 Captive market opportunity in 2019 totals ~4.0GW

- ❖ Container size direct sales to premium rooftop installers, stable predictable quarterly demand
- ❖ Our own energy business projects
- ❖ Turnkey solutions

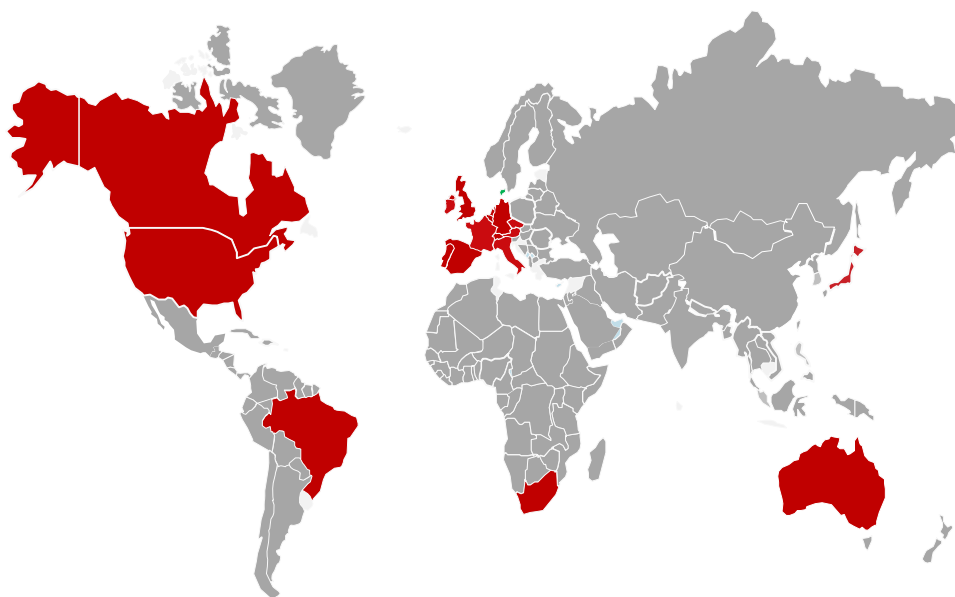
🌅 Other premium high price markets in 2019 total ~1.5GW, including U.S.





# 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

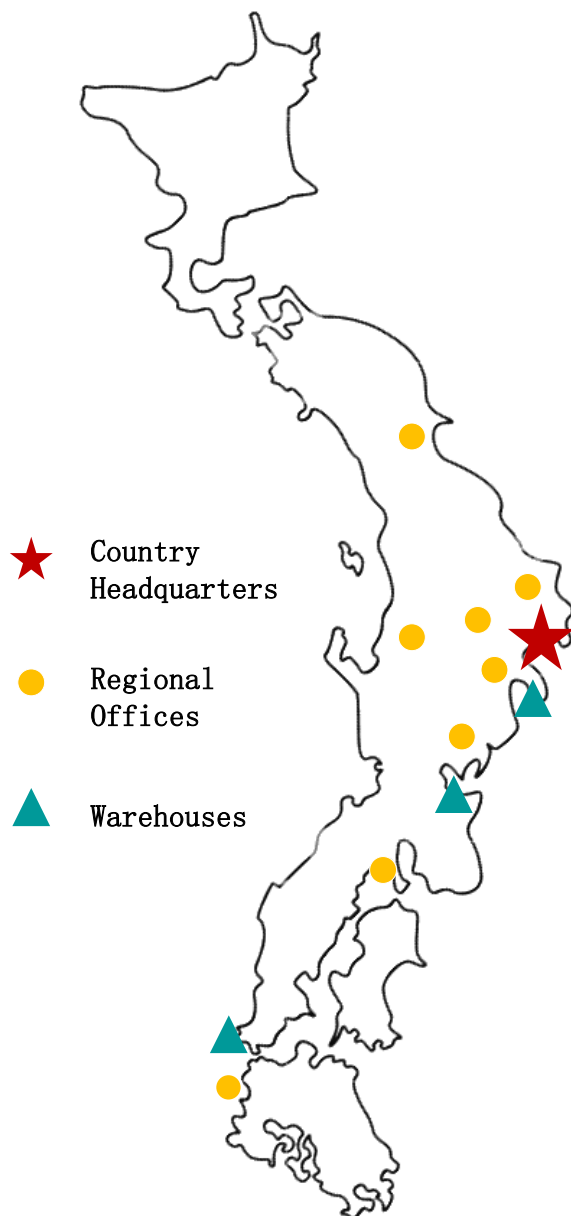
### Target Markets

Japan, Australia, US, Canada, Brazil, South Africa, EU

### Barriers to Entry

- Dedicated teams
  - Product differentiation & positioning
  - Financing & insurance
  - Warehousing, training & technical support
  - Dedicated channel policies & management, co-marketing
- ➔ Customer loyalty

# 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

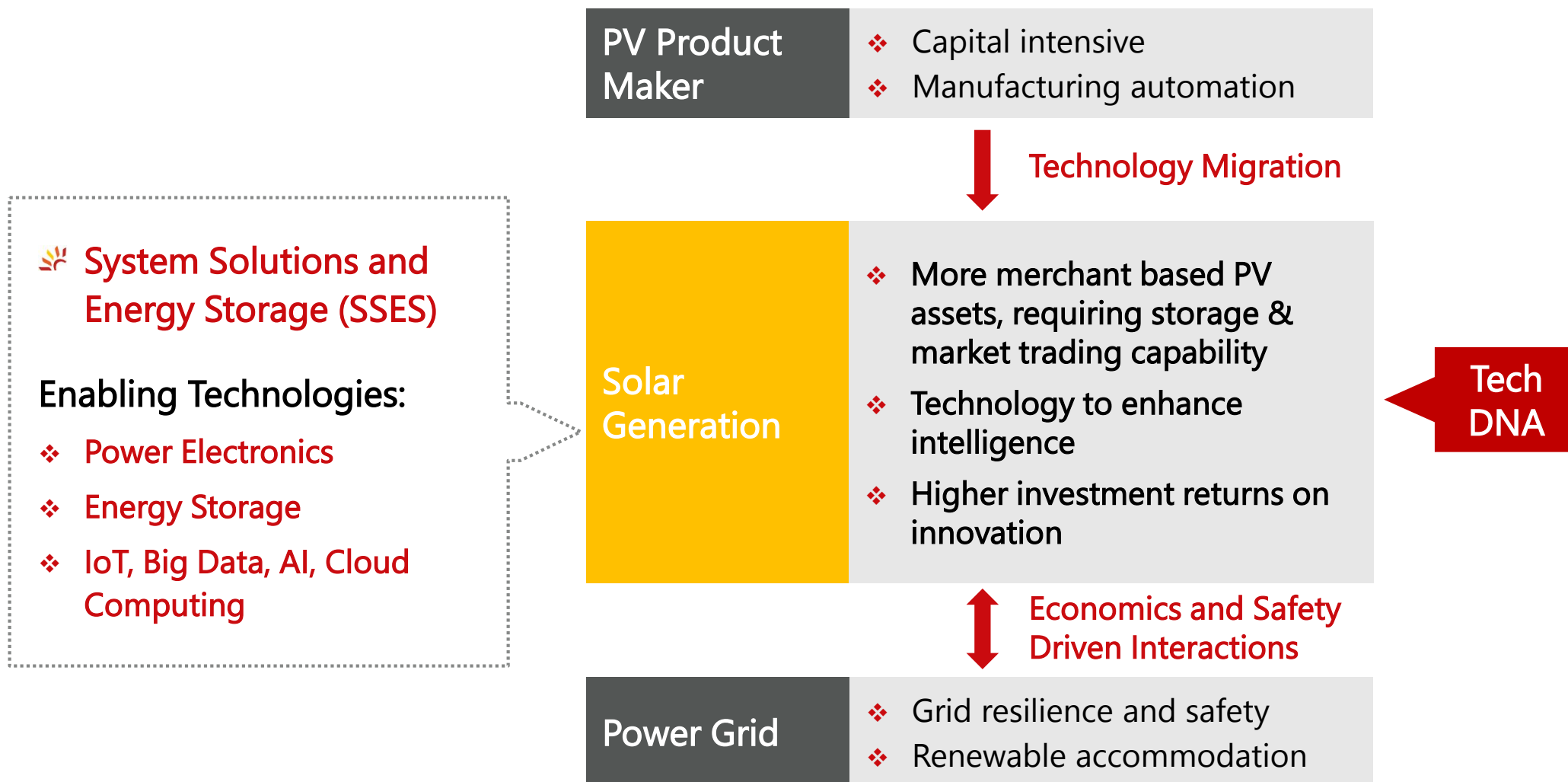
### Controlled Risks

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

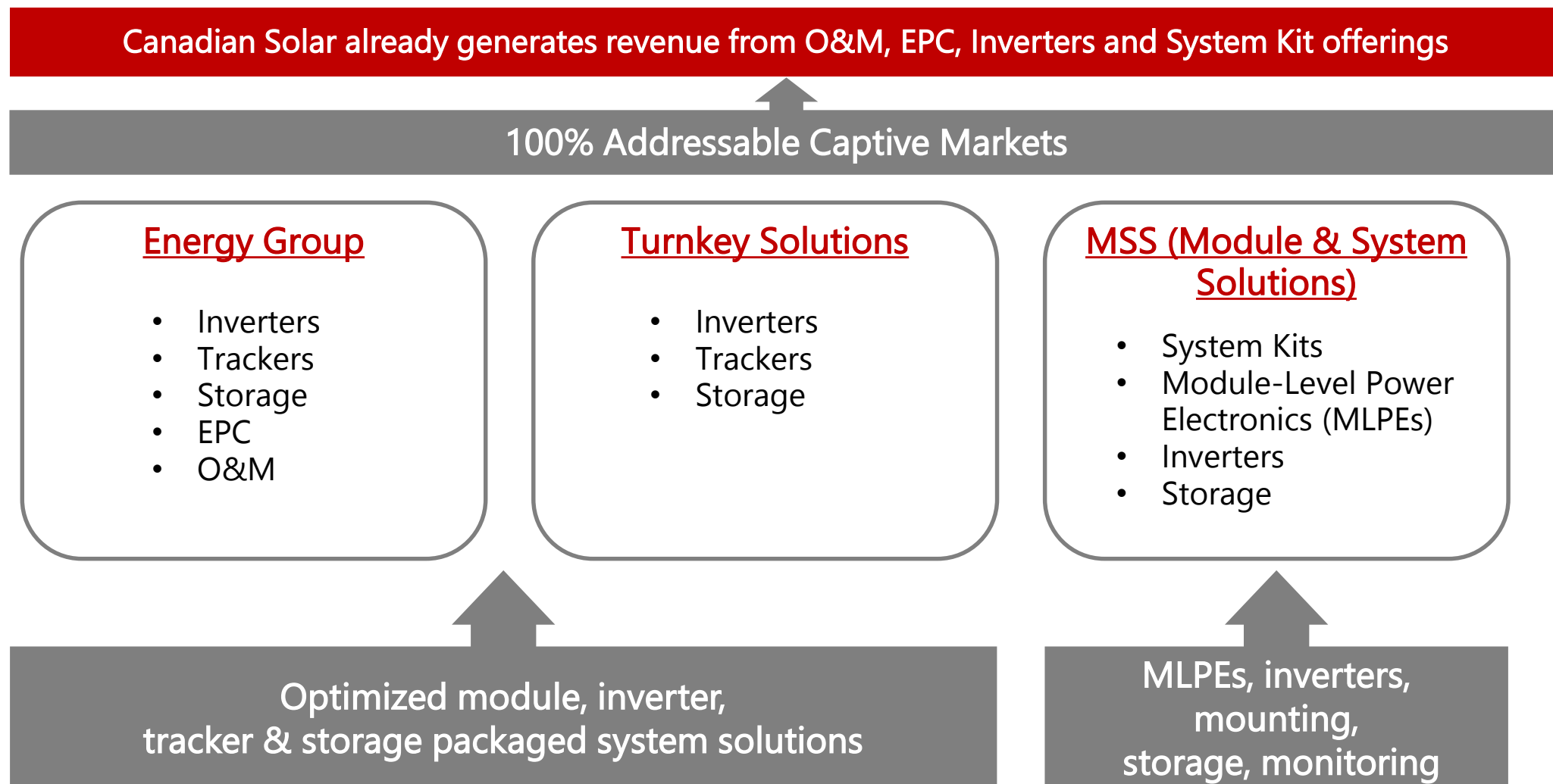
**Enhanced Opportunities** by bankability, brand & balance sheet



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



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





## Table of Contents

- 1 Company Overview
- 2 The Market Opportunity
- 3 Module and Systems Solutions
- 4 Energy Business**
- 5 Financial Highlights

## 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



US & Canada

San Francisco, CA  
Walnut Creek, CA  
Austin, Texas  
New York, NY  
Calgary, Canada  
Guelph, Canada



LATAM

Buenos Aires, Argentina  
Mexico City, Mexico  
Sao Paulo, Brazil



EMEA

Milan, Italy  
Madrid, Spain  
London, UK  
Warsaw, Poland



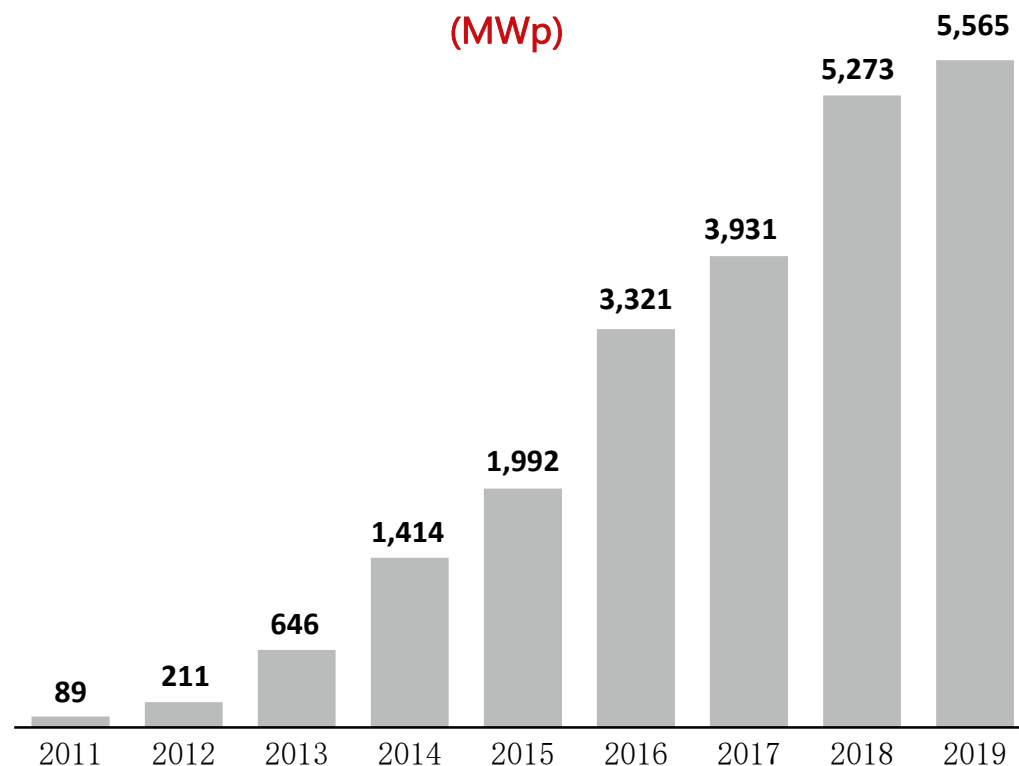
APAC

Tokyo, Japan  
Hong Kong, China  
Singapore  
Melbourne, Australia  
Seoul, Korea  
Taipei, Taiwan

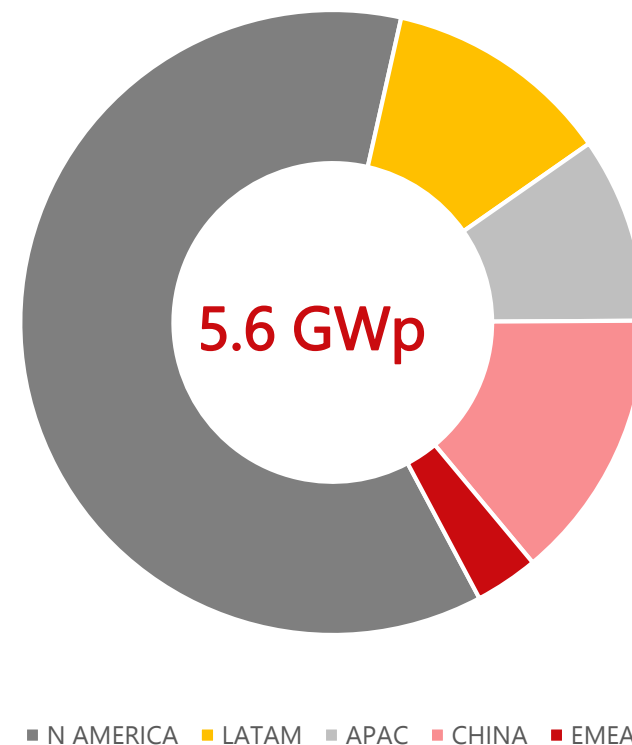


## Track record developing, building and operating solar power plants across major energy markets in 6 continents

Cumulative Solar Power Plants Built and Connected<sup>(1)</sup>



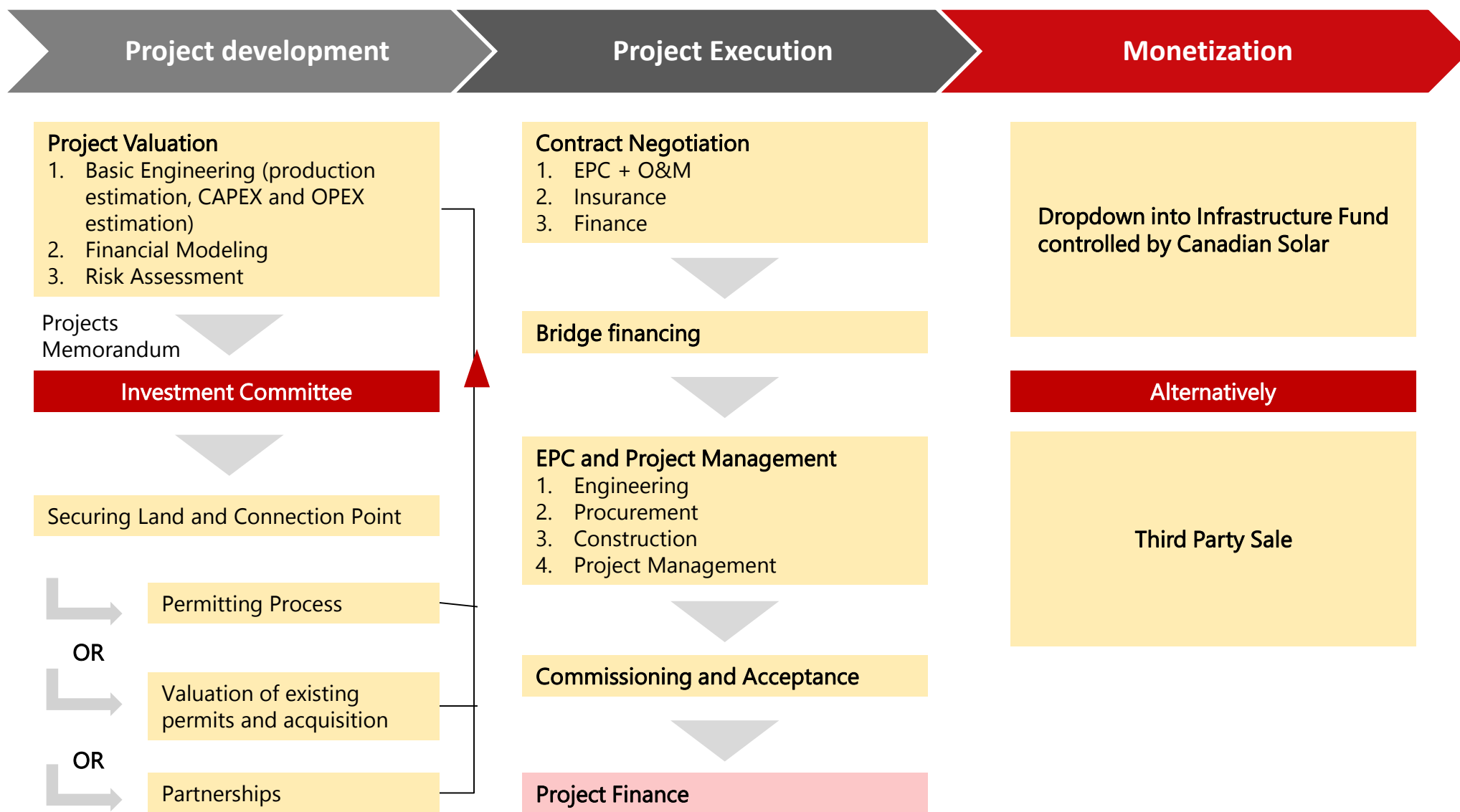
Regional mix of all projects built and connected to date



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.

<Portfolio as of the end of 3<sup>rd</sup> FP>

# of projects	18 <sub>projects</sub>
Total project valuation price as of the end of 3 <sup>rd</sup> FP <sup>(note)</sup>	¥47.09 <sub>Bn</sub>
Panel output of AUM	105.6 <sub>MW</sub>

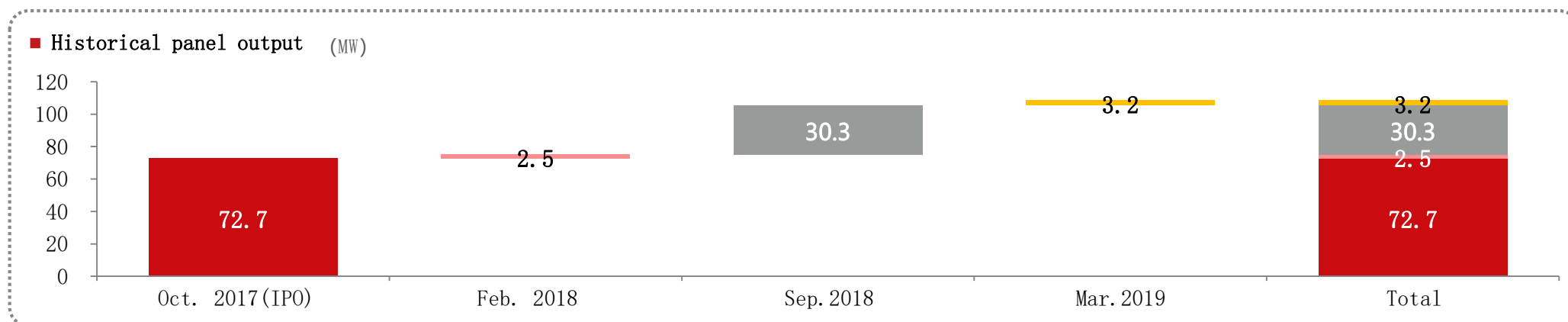
<Assets acquired during 4<sup>th</sup> FP>

# of projects	2 <sub>projects</sub>
Acquisition price <sup>(note)</sup>	¥1.32 <sub>Bn</sub>
Panel output of acquisitions	3.2 <sub>MW</sub>

<Portfolio as of the end of 4<sup>th</sup> FP>

# of projects	20 <sub>projects</sub>
Total project valuation price as of the end of 4 <sup>th</sup> FP <sup>(note)</sup>	¥50.02 <sub>Bn</sub>
Panel output of AUM	108.9 <sub>MW</sub>

(Note) For owned assets as of the end of the 3<sup>rd</sup> at December 31, 2018 and 4<sup>th</sup> 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 4<sup>th</sup> 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...

**S-01** CS Shibushi-shi Power Plant 1.2MW



**S-02** CS Isa-shi Power Plant 0.9MW



**S-03** CS Kasama-shi Power Plant 2.1MW



**S-04** CS Isa-shi Dai-ni Power Plant 2.0MW



**S-05** CS Yusui-cho Power Plant 1.7MW



**S-06** CS Isa-shi Dai-san Power Plant 2.2MW



**S-07** CS Kasama-shi Dai-ni Power Plant 2.1MW



**S-08** CS Hiji-machi Power Plant 2.6MW



**S-09** CS Ashikita-machi Power Plant 2.3MW



**S-10** CS Minami Shimabara-shi Power Plant (East & West) 3.9MW



**S-11** CS Minano-machi Power Plant 2.4MW



**S-12** CS Kannami-cho Power Plant 1.3MW



**S-13** CS Mashiki-machi Power Plant 47.7MW



**S-14** CS Koriyama-shi Power Plant 0.6MW



**S-15** CS Tsuyama-shi Power Plant 2.0MW



**S-16** CS Ena-shi Power Plant 2.1MW



**S-17** CS Daisen-cho Power Plant (A)(B) 27.3MW



**S-18** CS Takayama-shi Power Plant 1.0MW



**S-19** CS Misato-machi 1.1MW



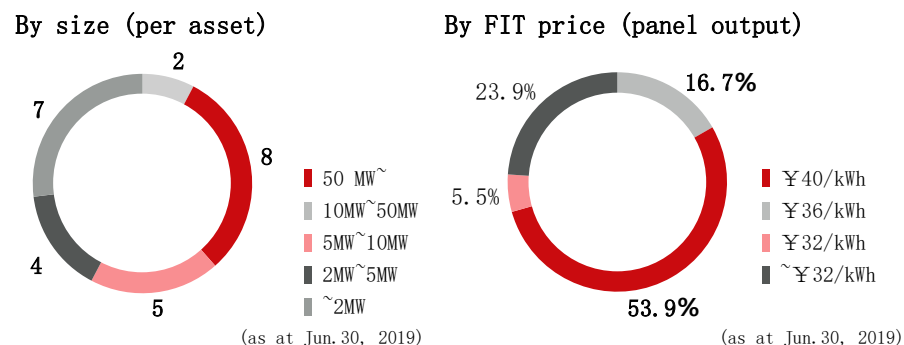
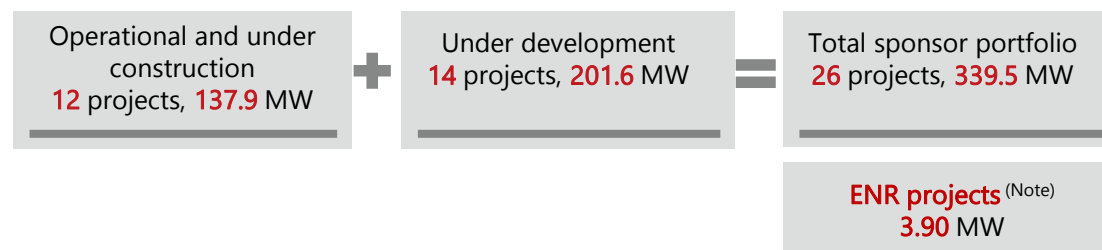
**S-20** CS Marumori-machi 2.2MW



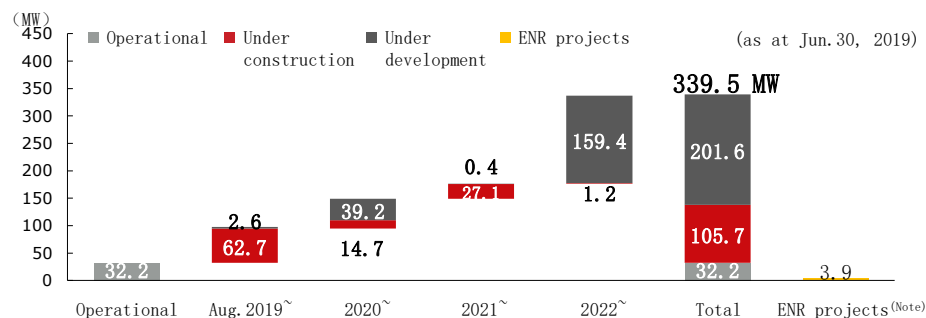
# ... and are expected to grow to 339.5MW in the next few years driven by Canadian Solar dropdowns

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

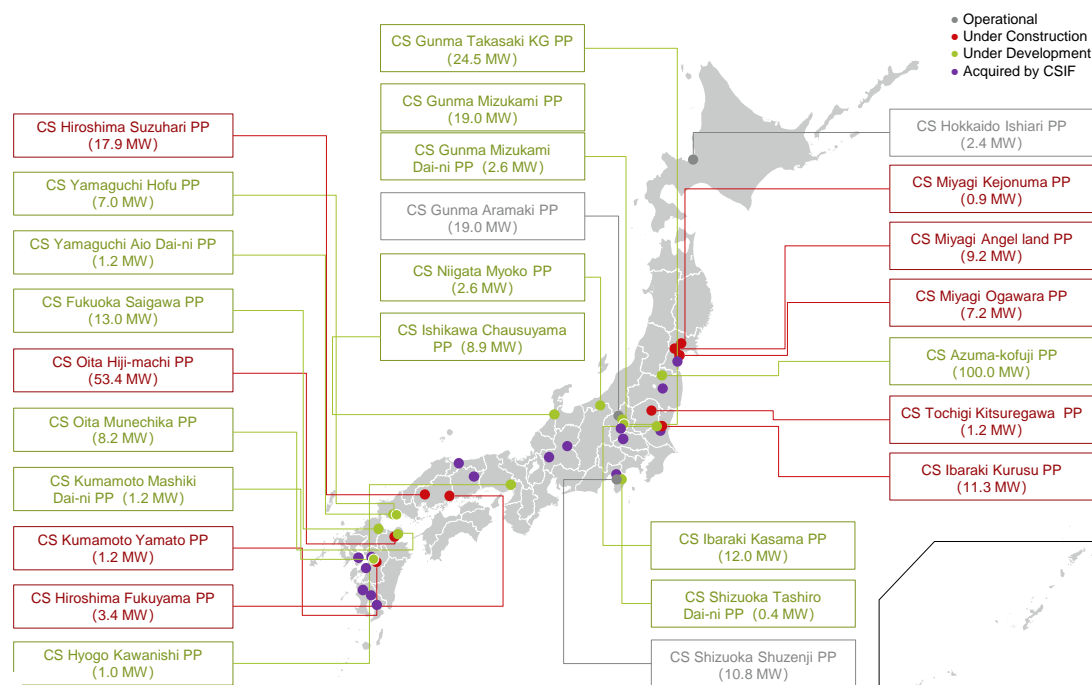
❖ Sponsor portfolio snapshot  
FIT purchase price range: Mostly ¥32~¥40/kWh



❖ Operational start year and 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.



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

Early- Mid-stage pipeline

**9.0 GWp**

Late-stage pipeline/backlog

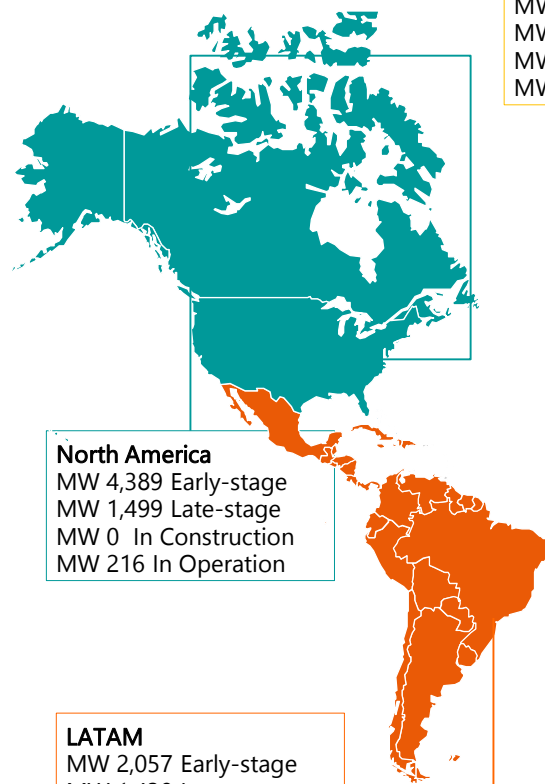
**4.0 GWp**

Plants in construction

**415 MWp**

Plants in operation

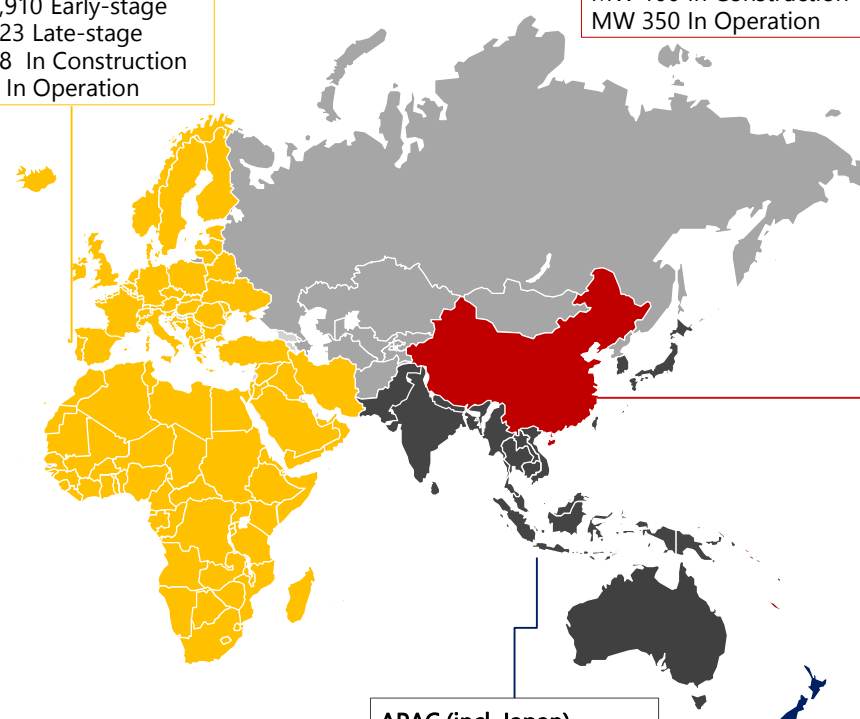
**871 MWp**



**North America**  
MW 4,389 Early-stage  
MW 1,499 Late-stage  
MW 0 In Construction  
MW 216 In Operation

**LATAM**  
MW 2,057 Early-stage  
MW 1,430 Late-stage  
MW 244 In Construction  
MW 100 In Operation

**EMEA**  
MW 1,910 Early-stage  
MW 223 Late-stage  
MW 18 In Construction  
MW 3 In Operation



**China**  
MW 0 Early-stage  
MW 45 Late-stage  
MW 100 In Construction  
MW 350 In Operation

**APAC (incl. Japan)**  
MW 673 Early-stage  
MW 798 Late-stage  
MW 53 In Construction  
MW 202 In Operation

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 quarters.

Source: Canadian Solar Inc.



# 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

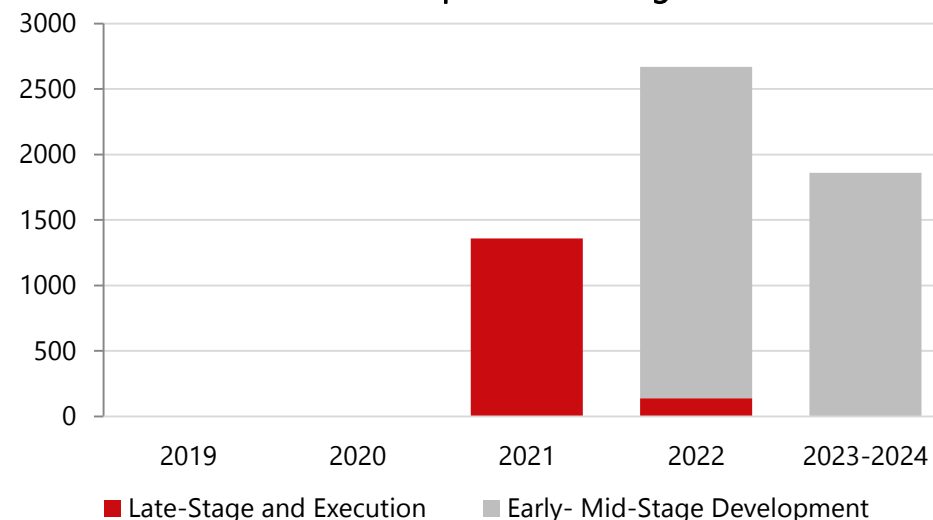
**0 MW<sub>p</sub>**  
In Construction

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



(MWp)

2019-2024 Pipeline COD Targets



- ❖ 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.

## Recently Confirmed Projects<sup>(1)</sup>:

- Geenex portfolio acquisition 591 MWp

## Projects Update

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

(1) Recently Confirmed Projects: Projects awarded with a Power Purchase Agreement granted within the past 3-6 months

Source: Canadian Solar Inc.

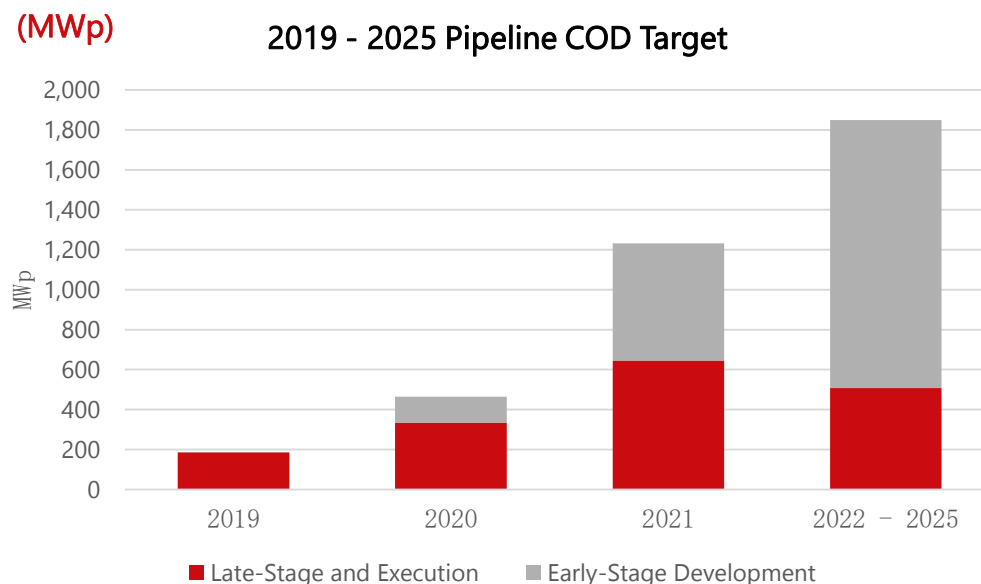
# Strong competitive position in key energy markets - LATAM

**2,057 MW<sub>p</sub>**  
Early-Stage

**1,430 MW<sub>p</sub>**  
Late-Stage

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

**100 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

- ❖ 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.

Source: Canadian Solar Inc. as of November 29, 2019

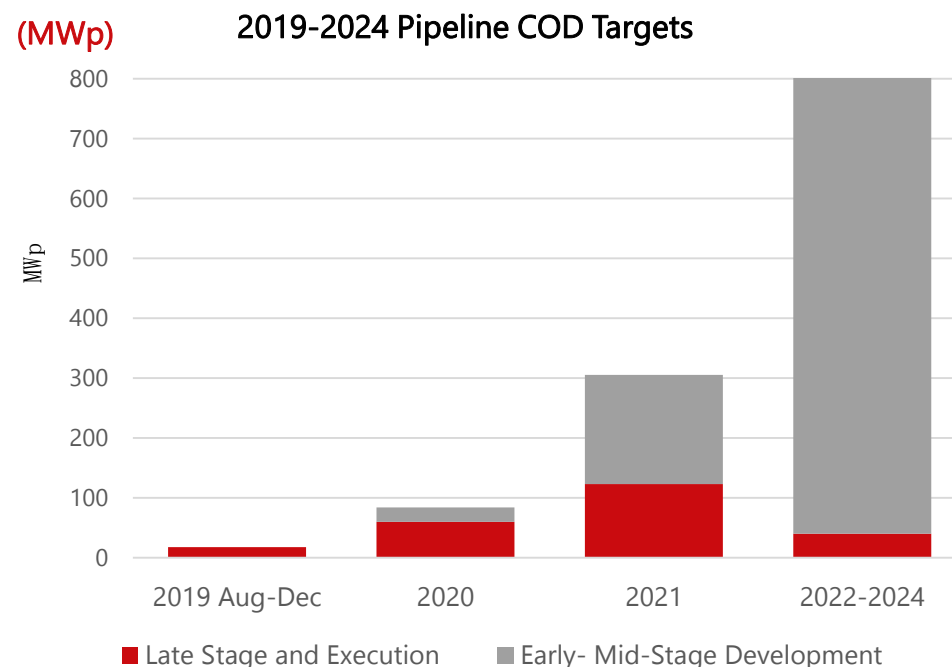
# Strong competitive position in key energy markets - EMEA

**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



- ❖ 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.

## Recently Confirmed Projects<sup>(1)</sup>:

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

## 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

(1) Recently Confirmed Projects: Projects awarded with a Power Purchase Agreement granted within the past 3-6 months  
Source: Canadian Solar, Inc. as of October 30<sup>th</sup>, 2019

# Strong competitive position in key energy markets - APAC <sup>(1)</sup>

**53 MW<sub>p</sub>**  
Early- Mid-Stage

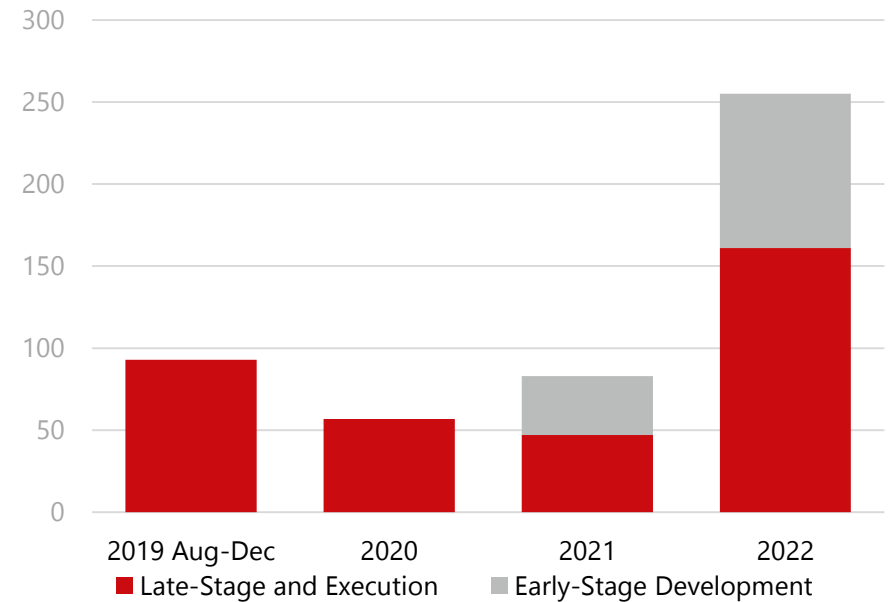
**276 MW<sub>p</sub>**  
Late-Stage

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

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



(MWp) 2019-2022 Pipeline COD Targets



- ❖ 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

- ❖ 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

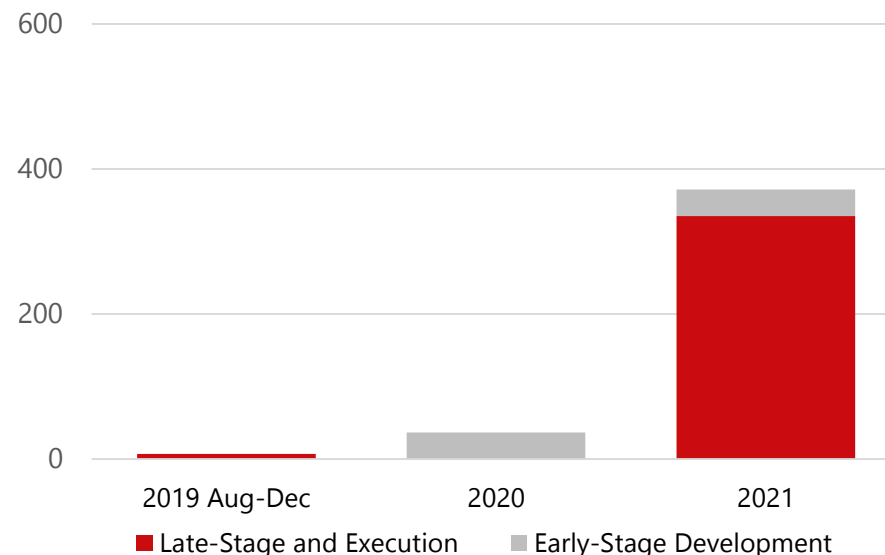
**0 MW<sub>p</sub>**  
In Construction

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



(MW<sub>p</sub>)

2019 Aug-2022 Pipeline COD Targets



- ❖ 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

- ❖ 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.

Source: Canadian Solar Inc.



# Strategic Direction

<b>Grow Our Pipeline in Attractive Markets</b>	<ul style="list-style-type: none"><li>❖ Focus on markets where partial asset retention and control provide the best long-term value</li></ul>
<b>Maintain Control of the Value Chain</b>	<ul style="list-style-type: none"><li>❖ Partner with low cost of capital entities to build a series of special purpose vehicles to drop our solar assets once COD is reached</li><li>❖ 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</li></ul>
<b>Maximize Synergies Across the Value Chain</b>	<ul style="list-style-type: none"><li>❖ Optimize development capital cycle</li><li>❖ Manage EPC and leverage scale to implement centralized procurement</li><li>❖ Secure Asset Management and O&amp;M contracts</li></ul>
<b>Build Long-Term Recurring Revenue Stream</b>	<ul style="list-style-type: none"><li>❖ Generate predictable cash flows from power sales, O&amp;M and asset management fees to supplement revenue from sale of power plants</li><li>❖ Gradually grow asset base through partial ownership, O&amp;M and asset management contracts</li></ul>

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

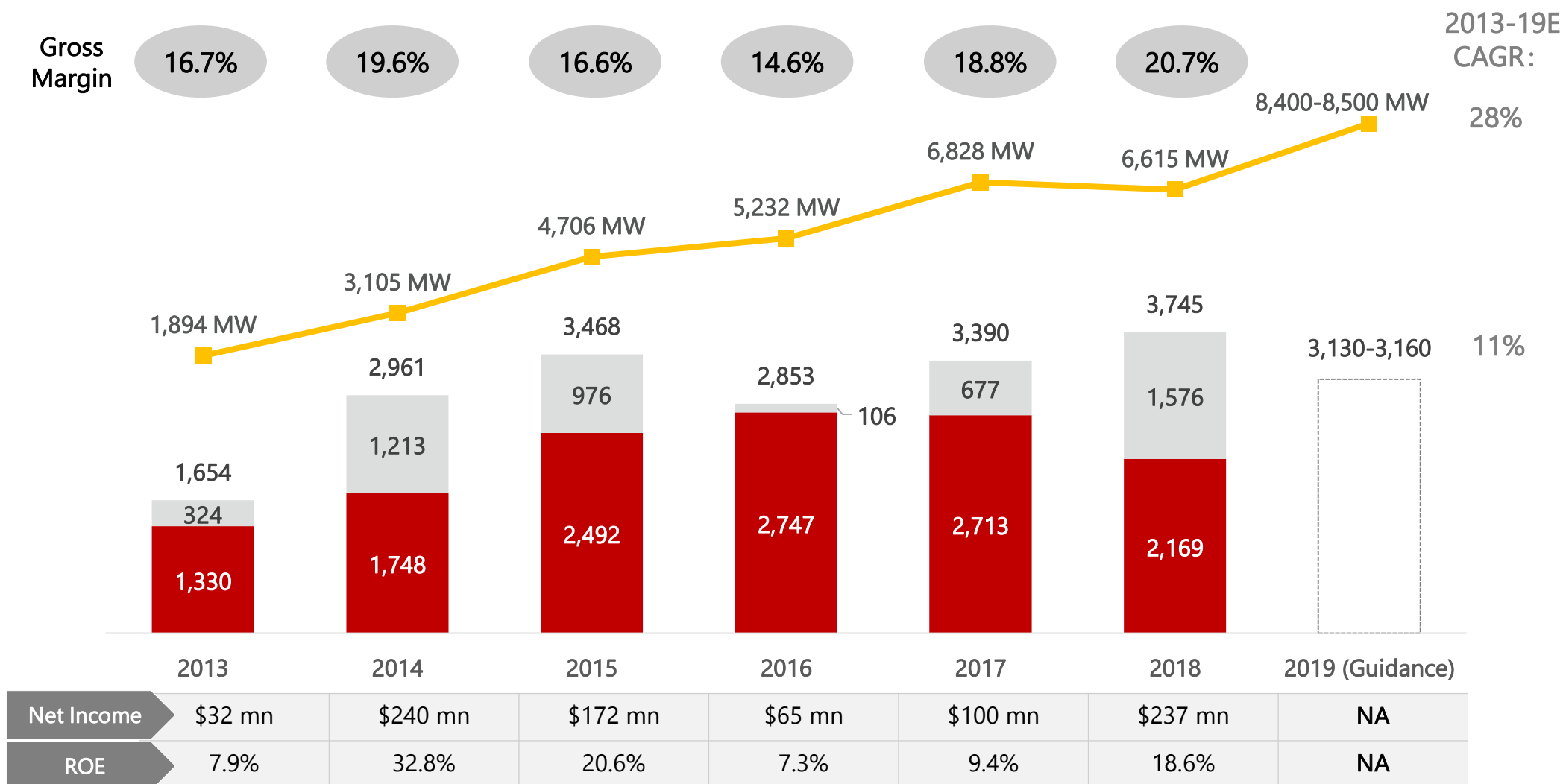


## Table of Contents

- 1 Company Overview
- 2 The Market Opportunity
- 3 Module and Systems Solutions
- 4 Energy Business
- 5 Financial Highlights**

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

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

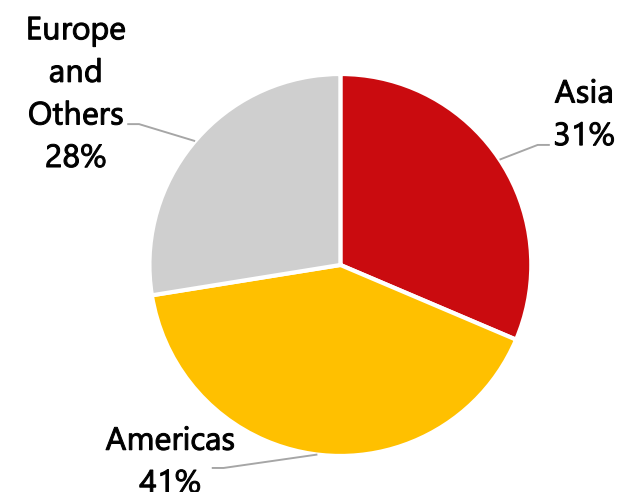
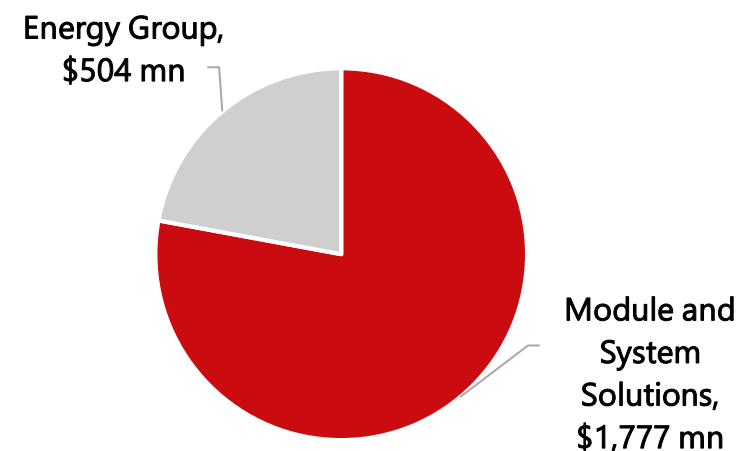


# Consolidated Income Statement Summary

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

(1) 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.

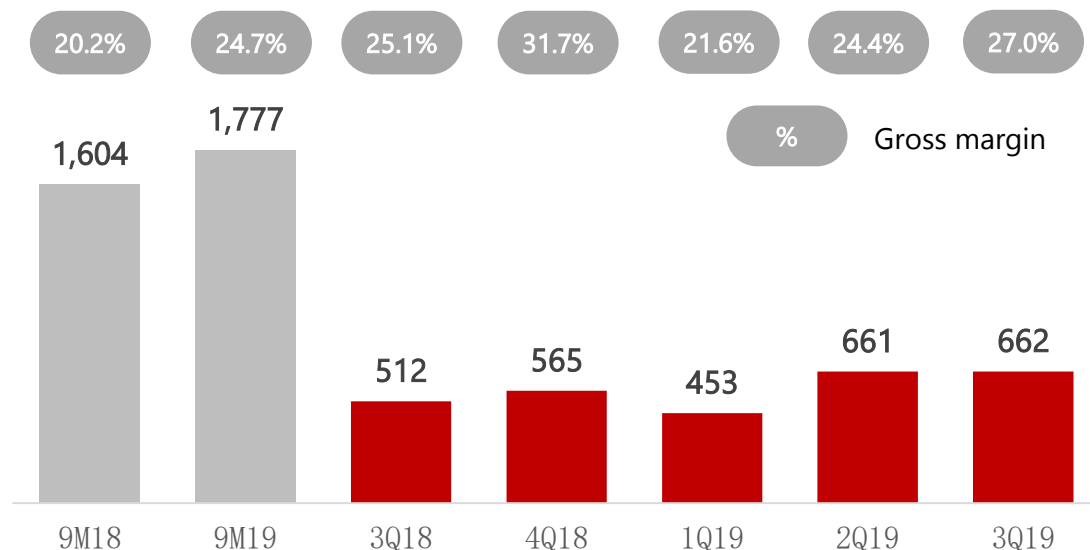
9M19



# Modules and System Solutions Summary Financials

USD millions except shipment data	3Q19	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.

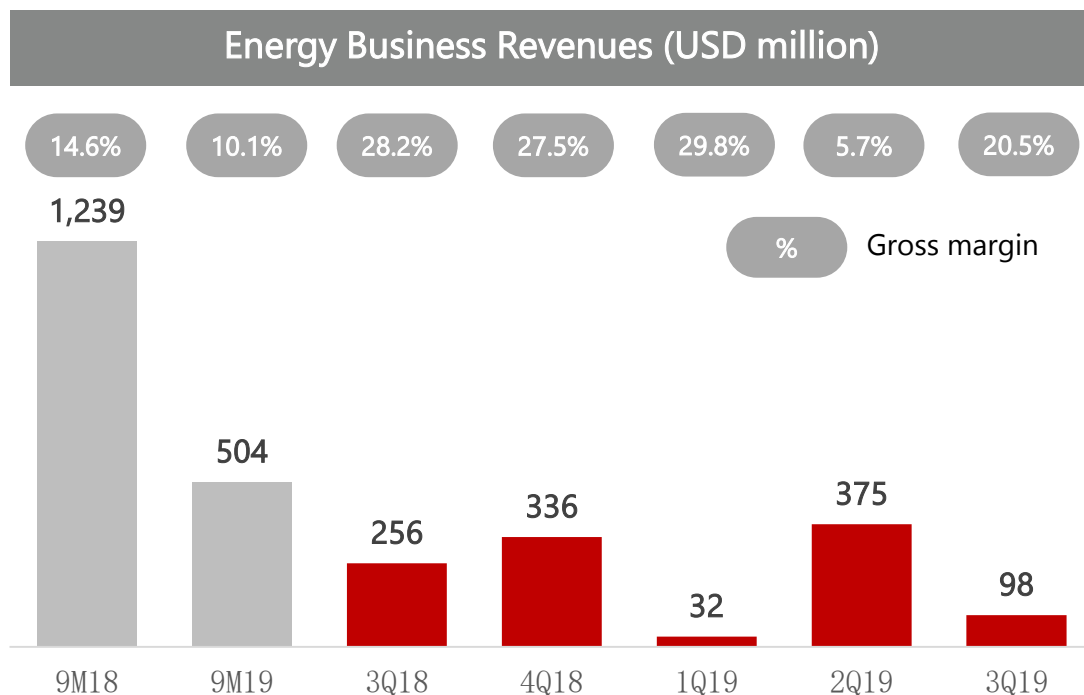
## Key highlights

- 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 pre-construction.
- Despite lower revenues, Q3 gross margin expanded due to greater share of NTP sales which has a higher gross margin % contribution.

# Operating expenses

## Operating Expenses as % of Revenue

### Total operating expenses

9.5%

11.4%

10.9%

11.0%

15.0%

## Commentary

☀ In addition to the expenses below, in 2016-18, CSI had an annual average of \$45 mn in other operating income, consisting primarily of gains/losses from the disposal of solar power systems and property, plant and equipment ; government grants received; and compensation from business interruption insurance.

### Selling expenses

4.3%

5.1%

4.6%

4.4%

5.7%

2015

2016

2017

2018

2019 YTD

☀ Selling expenses in Q3 increased marginally to \$47 mn from \$45 mn in Q2 and \$38 mn in Q3 2018.

☀ The sequential increase was mainly due to an increase in shipping and handling costs, partially offset by lower project transaction fees.

### General & administrative expenses

4.7%

7.1%

6.8%

6.6%

7.8%

2015

2016

2017

2018

2019 YTD

☀ G&A expenses in Q3 declined to \$62 mn from \$66 mn in Q2 and \$59 mn in Q3 2018.

☀ The sequential decline was mainly due to a \$7 mn decrease in impairment in Q3 relative to Q2, and \$2 mn decline in labor cost, partially offset by a \$6 mn customer settlement.

### Research & development expenses

0.5%

0.6%

0.8%

1.2%

1.6%

2015

2016

2017

2018

2019 YTD

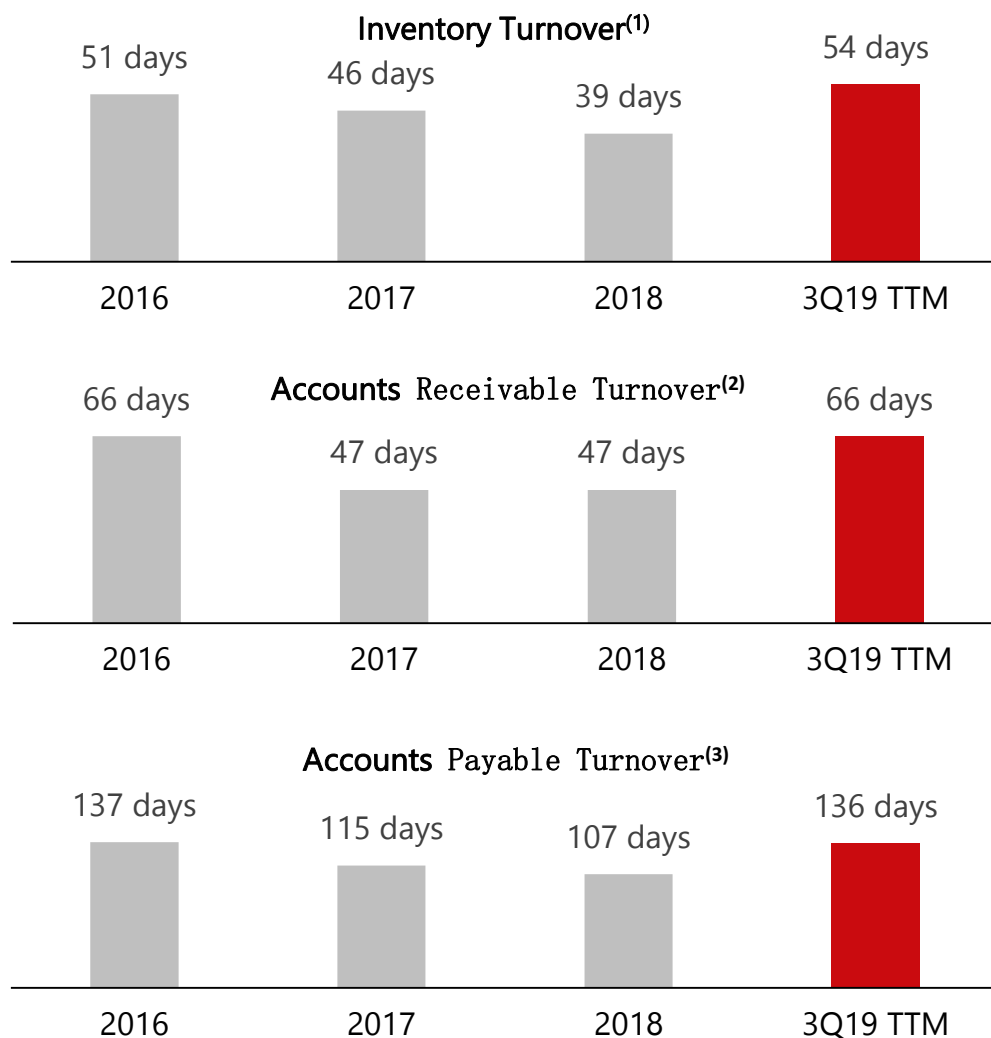
☀ R&D expenses in Q3 were roughly unchanged qoq, at \$12 mn, and slightly higher than Q3 2018 at \$10 mn.

☀ R&D expenses have grown at 37% CAGR over 2015-18, from \$17 mn in full year 2015 to \$44 mn in 2018.

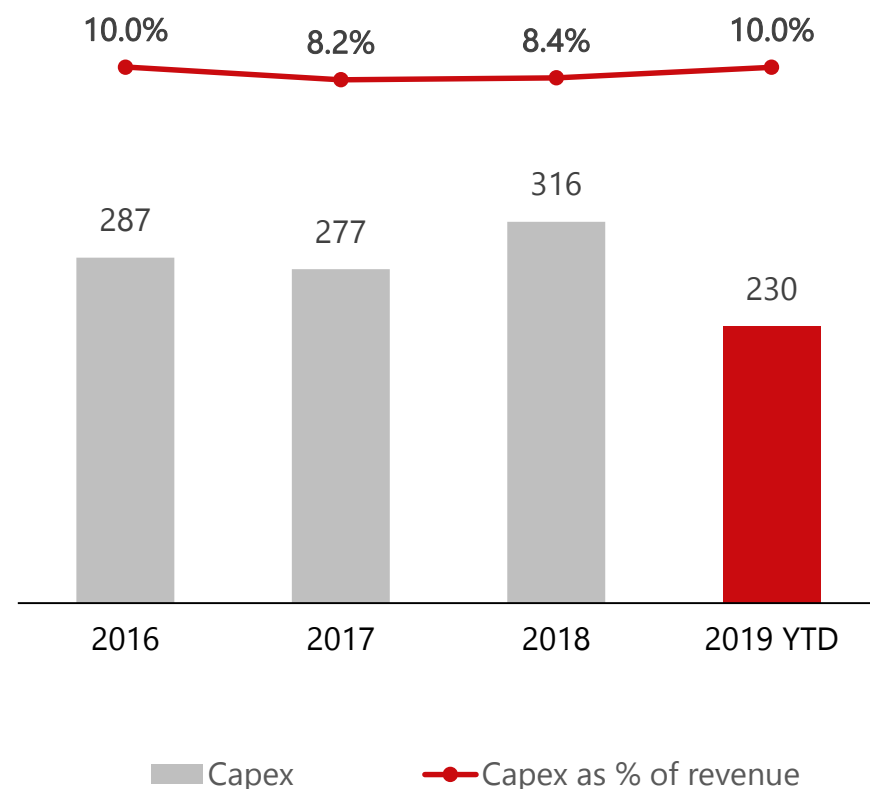
☀ YTD, Canadian Solar has spent \$37 mn in R&D.

# Disciplined working capital management, disciplined and balanced capex

## Working Capital Days



## Capital Expenditures (USD million)<sup>(4)</sup>



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.

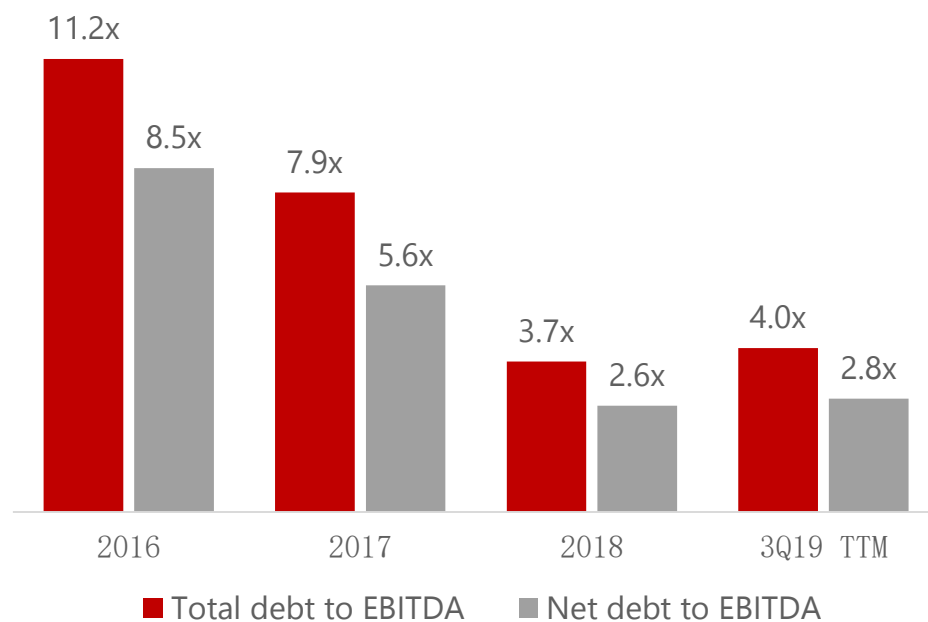
3) Accounts payable days calculated as average accounts payable divided by cost of revenues x365.

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

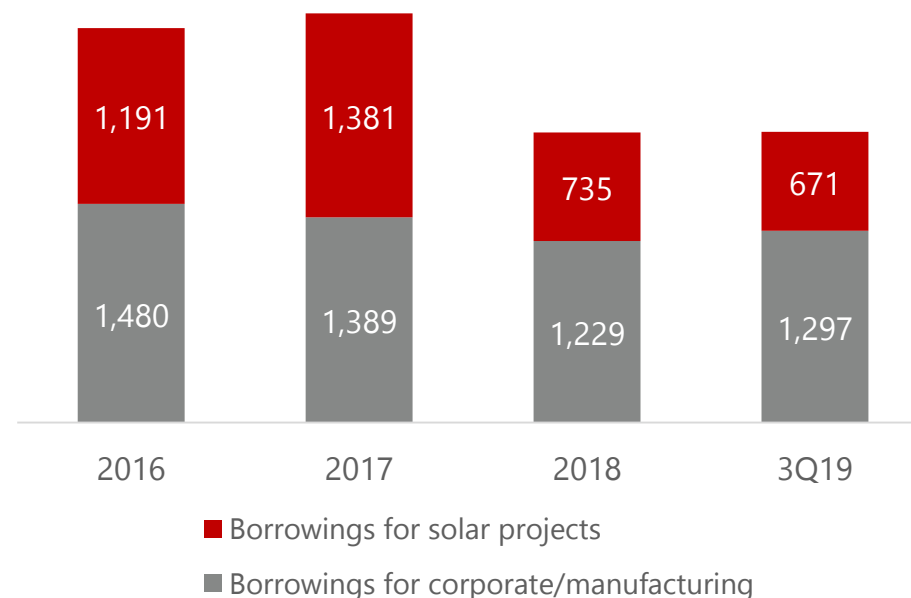
- ☀️ Total and net debt to EBITDA now at 4.0x and 2.8x respectively.
- ☀️ The ratios would be approximately 1x lower excluding project level non-recourse debt.
- ☀️ Deleverage mainly driven by growth in EBITDA and reduction in project debt associated with project sales.

Total and net debt to EBITDA



Note: Net debt calculation nets out restricted cash securing debt only.

Total debt, USD mn

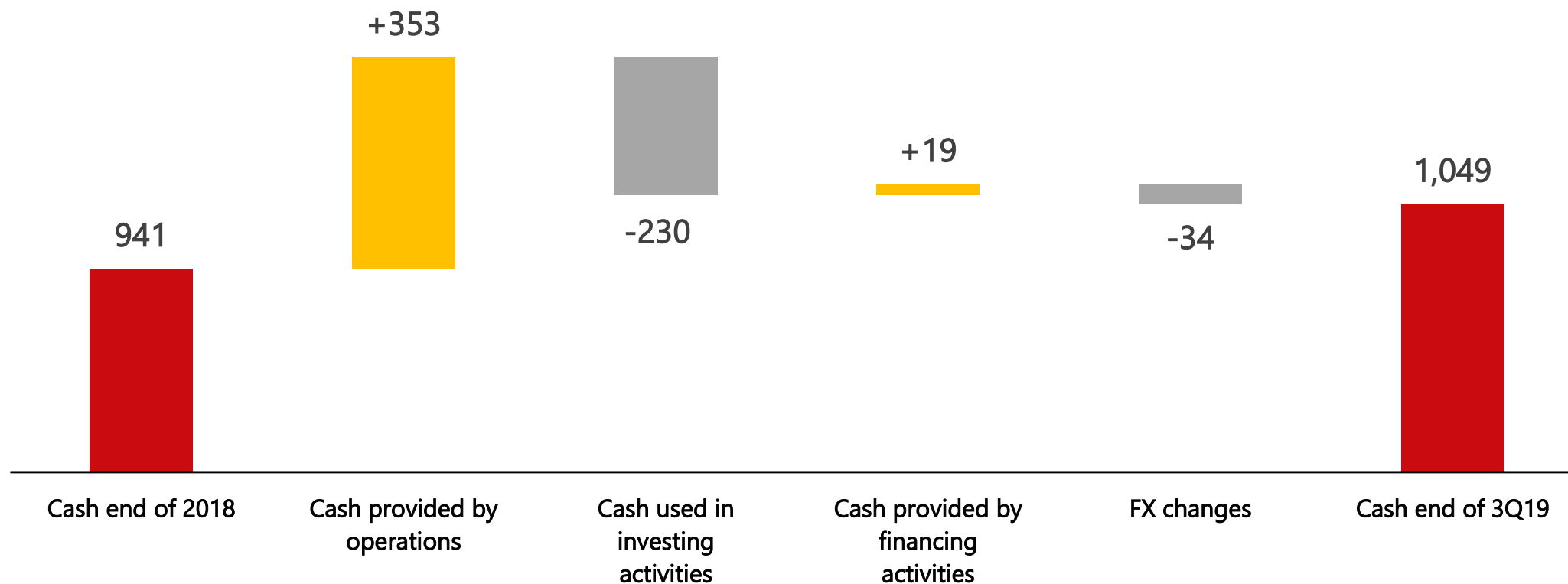




# We have maintained a strong cash position while continuing to invest in the long-term success of our business

## Cash flow movement from FY18 year-end

USD millions



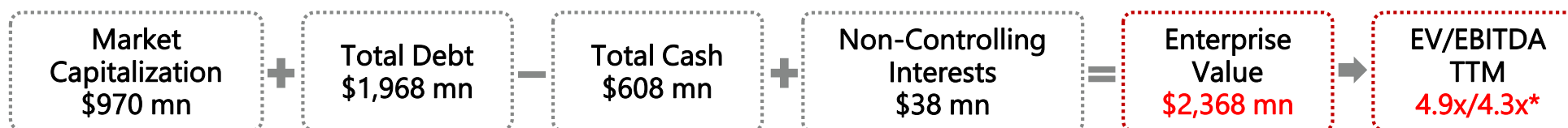
Note: Values based on Canadian Solar's unaudited statement of cash flows.

# 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
<b>Total debt</b>	<b>1,965</b>	<b>1,928</b>	<b>1,859</b>	<b>1,968</b>
Cash and equivalents	444	370	438	526
Restricted cash - current:	481	516	526	515
Of which to secure debt:	134	67	75	82
<b>Total cash (for EV calculation)</b>	<b>578</b>	<b>437</b>	<b>513</b>	<b>608</b>
<b>Net debt</b>	<b>1,386</b>	<b>1,491</b>	<b>1,345</b>	<b>1,360</b>

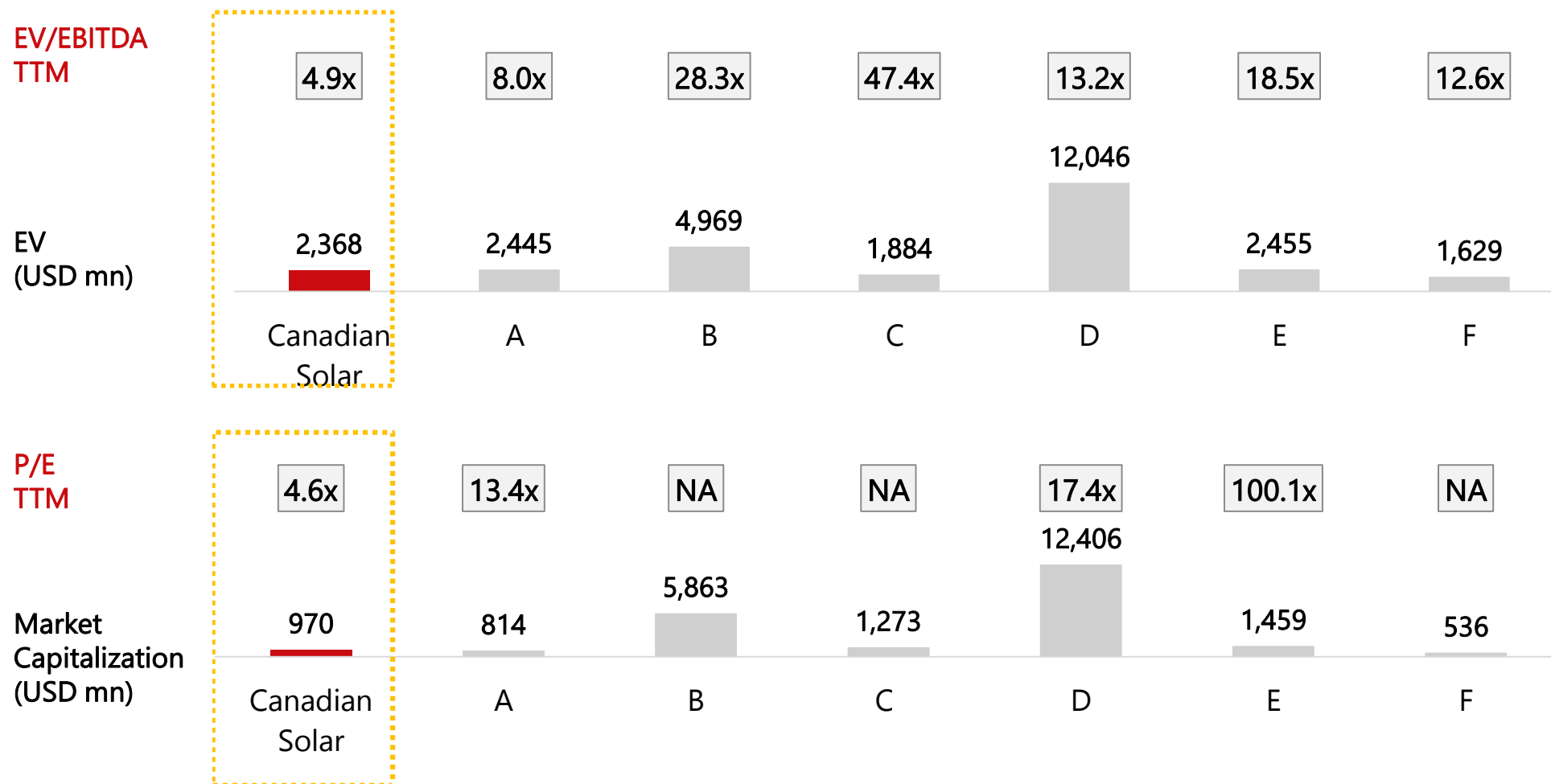
EBITDA Calculation					
	4Q18	1Q19	2Q19	3Q19	TTM
Total revenue	901	485	1,036	760	3,182
- COGS	-630	-378	-854	-561	-2,423
Gross profit	271	107	182	199	759
- Operating expenses	-135	-101	-122	-119	-477
<b>Operating profit</b>	<b>136</b>	<b>6</b>	<b>60</b>	<b>80</b>	<b>282</b>
-/+ Other expenses/income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

\*EBITDA including impairments



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.





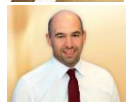


# Attractive valuation supported by resilient financial performance



- ❖ 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

Experienced Independent Directors		<b>Dr. Shawn Qu</b> Chairman and CEO	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>❖ Head of Asia of Hands-on Mobile, Inc.</li> <li>❖ Asia Pacific regional director of marketing planning and consumer insight at Motorola Inc.</li> </ul>
		<b>Dr. Huifeng Chang</b> SVP and Chief Financial Officer	<ul style="list-style-type: none"> <li>❖ Co-Head of Sales &amp; Trading at CICC US in New York</li> <li>❖ CEO of CSOP Asset Management in Hong Kong</li> <li>❖ Vice President of Citigroup Equity Proprietary Investment in New York</li> </ul>
		<b>Guangchun Zhang</b> SVP and Chief Operating Officer	<ul style="list-style-type: none"> <li>❖ Vice President for R&amp;D and Industrialization of Manufacturing Technology at Suntech Power Holdings</li> <li>❖ Centre for Photovoltaic Engineering at the University of New South Wales and Pacific Solar Pty. Limited.</li> </ul>
		<b>Ismael Guerrero</b> CVP and President of Energy Group	<ul style="list-style-type: none"> <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>
		<b>Jianyi Zhang</b> SVP and Chief Compliance Officer	<ul style="list-style-type: none"> <li>❖ Senior advisor to several Chinese law firms</li> <li>❖ Senior assistant general counsel at Walmart Stores, Inc.</li> <li>❖ Managing Partner at Troutman Sanders LLP</li> </ul>
		<b>Dr. Guoqiang Xing</b> SVP and Chief Technology Officer	<ul style="list-style-type: none"> <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>
		<b>Robert McDermott</b> Chair of the Nominating and Corporate Governance, and member of Audit and Compensation Committees	<ul style="list-style-type: none"> <li>❖ Partner with McMillan LLP, a business and commercial law firm</li> <li>❖ Director and senior officer of Boliden Ltd.</li> </ul>
		<b>Dr. Harry E. Ruda</b> Chair of Technology, and member of the Audit, Nominating and Governance, and Compensation Committees	<ul style="list-style-type: none"> <li>❖ Director of the Centre for Advanced Nanotechnology, Stanley Meek Chair in Nanotechnology and Prof. of Applied Science and Engineering at the University of Toronto, Canada</li> </ul>
		<b>Andrew Wong</b> Chair of the Compensation, and member of the Audit, Nominating and Governance Committees	<ul style="list-style-type: none"> <li>❖ Senior Advisor to Board of Directors of Henderson Land Development Co.</li> <li>❖ Director of Ace Life Insurance Co. Ltd., China CITIC Bank Corp., Intime Retail (Group) Co. Ltd. And Shenzhen Yantian Port (Group) Co. Ltd.</li> </ul>
		<b>Arthur Wong</b> Chair of the Audit Committee, and member of Nominating and Governance, and Compensation Committees	<ul style="list-style-type: none"> <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
Module Shipments	2,387 MW	2.3 GW to 2.4 GW
Revenue <sup>(1)</sup>	\$759.9 mn	\$850 mn to \$880 mn
Gross Margin <sup>(1)</sup>	26.2%	19% to 21%

FY2018	FY2019E	YoY 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

(1) Includes MSS and Energy businesses.

# Consolidated Income Statement

<i>USD millions except per share data</i>	2017	2018	9M18	9M19	9M yoy	3Q18	4Q18	1Q19	2Q19	3Q19	3Q qoq	3Q yoy
<b>Net Revenue</b>	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%
<b>Gross profit</b>	<b>638</b>	<b>775</b>	<b>504</b>	<b>489</b>	<b>-3%</b>	<b>200</b>	<b>271</b>	<b>107</b>	<b>183</b>	<b>199</b>	<b>9%</b>	<b>-1%</b>
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		
<b>Total operating expenses, net</b>	<b>-368</b>	<b>-410</b>	<b>-276</b>	<b>-342</b>	<b>24%</b>	<b>-104</b>	<b>-135</b>	<b>-101</b>	<b>-122</b>	<b>-119</b>	<b>-3%</b>	<b>14%</b>
<b>Income from operations</b>	<b>269</b>	<b>365</b>	<b>228</b>	<b>147</b>	<b>-35%</b>	<b>96</b>	<b>137</b>	<b>7</b>	<b>61</b>	<b>80</b>	<b>32%</b>	<b>-16%</b>
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		
<b>Net income</b>	<b>103</b>	<b>242</b>	<b>128</b>	<b>99</b>		<b>68</b>	<b>114</b>	<b>-17</b>	<b>61</b>	<b>55</b>		
Less: net income attributable to non-controlling interests	3	5	3	(5)		2	2	-	(2)	(3)		
<b>Net income attributable to Canadian Solar Inc.</b>	<b>100</b>	<b>237</b>	<b>125</b>	<b>104</b>	<b>-17%</b>	<b>66</b>	<b>112</b>	<b>-17</b>	<b>63</b>	<b>58</b>	<b>-7%</b>	<b>-12%</b>
Earnings per share - basis	1.71	4.02	2.13	1.74		1.14	1.89	-0.29	1.05	0.97		
<b>Earnings per share – diluted</b>	<b>1.69</b>	<b>3.88</b>	<b>2.08</b>	<b>1.71</b>	<b>-18%</b>	<b>1.09</b>	<b>1.81</b>	<b>-0.29</b>	<b>1.04</b>	<b>0.96</b>	<b>-8%</b>	<b>-12%</b>

# Summary Balance Sheet

<i>USD millions</i>	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
<b>Total current assets</b>	<b>4,205</b>	<b>4,085</b>	<b>3,413</b>	<b>3,396</b>	<b>3,337</b>	<b>3,074</b>	<b>3,090</b>	<b>2,895</b>	<b>3,345</b>
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
<b>Total non-current assets</b>	<b>1,843</b>	<b>1,805</b>	<b>1,887</b>	<b>1,797</b>	<b>1,867</b>	<b>1,819</b>	<b>1,983</b>	<b>2,144</b>	<b>1,963</b>
<b>TOTAL ASSETS</b>	<b>6,048</b>	<b>5,890</b>	<b>5,300</b>	<b>5,193</b>	<b>5,204</b>	<b>4,893</b>	<b>5,073</b>	<b>5,039</b>	<b>5,308</b>
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
<b>Total current liabilities</b>	<b>4,412</b>	<b>4,108</b>	<b>3,620</b>	<b>3,663</b>	<b>3,645</b>	<b>2,948</b>	<b>3,064</b>	<b>2,931</b>	<b>3,080</b>
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
<b>Total non-current liabilities</b>	<b>645</b>	<b>722</b>	<b>536</b>	<b>427</b>	<b>357</b>	<b>672</b>	<b>736</b>	<b>787</b>	<b>862</b>
<b>TOTAL LIABILITIES</b>	<b>5,057</b>	<b>4,830</b>	<b>4,156</b>	<b>4,090</b>	<b>4,002</b>	<b>3,620</b>	<b>3,800</b>	<b>3,718</b>	<b>3,942</b>
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
<b>Total Canadian Solar Inc. shareholders' equity</b>	<b>966</b>	<b>1,032</b>	<b>1,104</b>	<b>1,065</b>	<b>1,161</b>	<b>1,225</b>	<b>1,230</b>	<b>1,279</b>	<b>1,327</b>
Non-controlling interests	25	28	40	38	41	48	43	42	39
<b>TOTAL EQUITY</b>	<b>991</b>	<b>1,060</b>	<b>1,144</b>	<b>1,103</b>	<b>1,202</b>	<b>1,273</b>	<b>1,273</b>	<b>1,321</b>	<b>1,366</b>

# GAAP to Non-GAAP Reconciliation

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

**CSIQ**  
Nasdaq Listed