



## **Investor Presentation**

Third Quarter 2019 Update January 9, 2020 CSIQ NASDAQ Listed

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### **Table of contents**

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

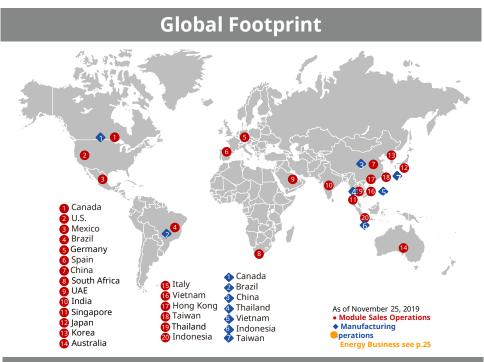


## **Company Description**

- 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



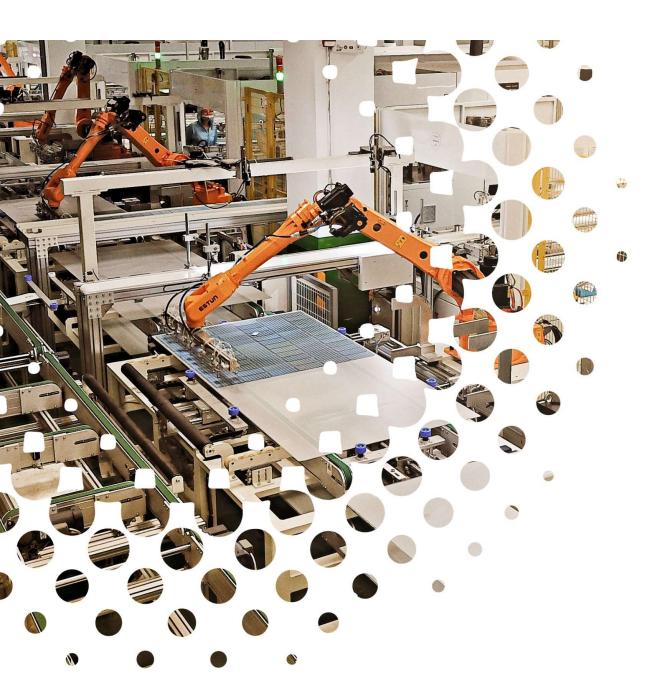
#### **Energy Business**

 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





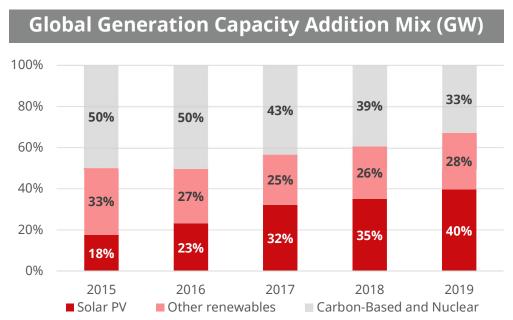
### **Table of contents**

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

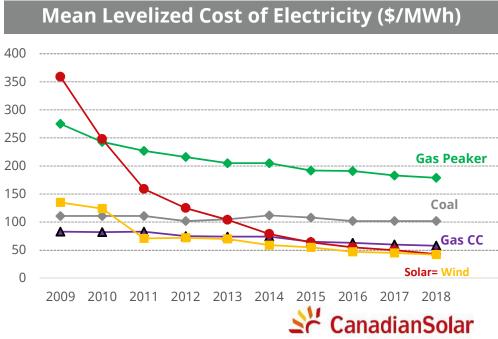


## Solar energy has already become mainstream...

- 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

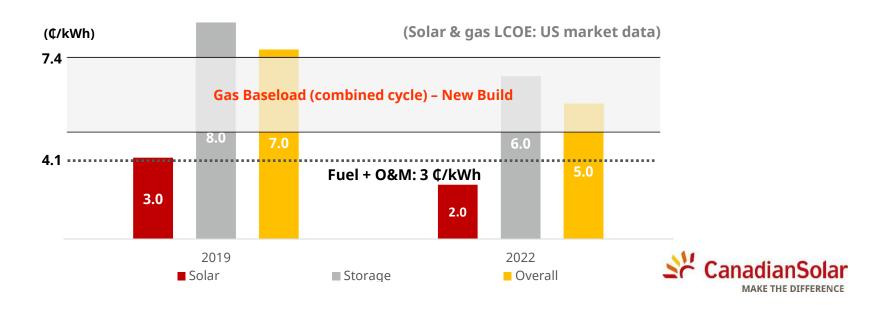




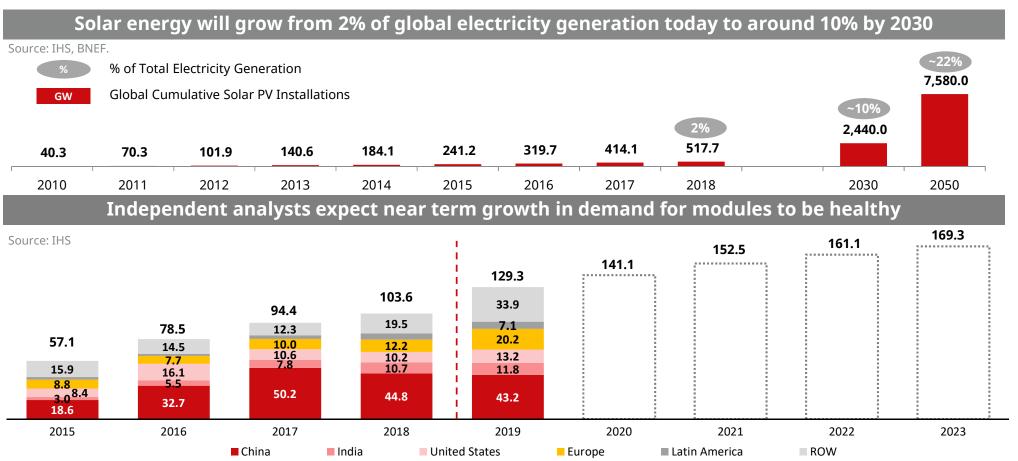


# Solar plus 4 hours of storage is competitive with gas generation and on a path to become cheaper than gas in the years ahead

- 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.



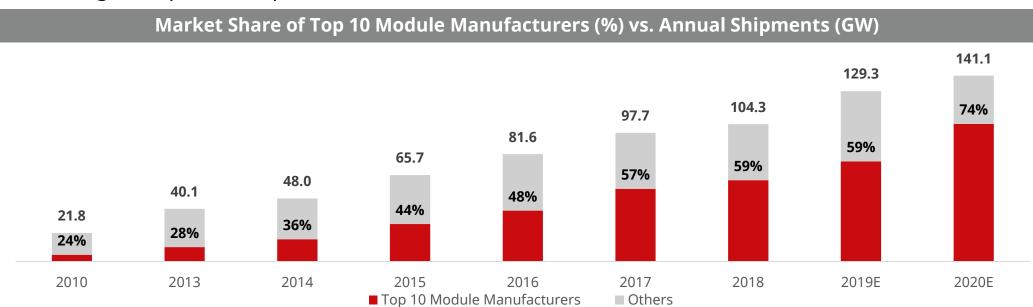
### Key energy markets remain underpenetrated providing long-term visibility into the demand environment for our business



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



Source: HIS, 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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- **1 Company Overview**
- **2** The Market Opportunity
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- **4 Energy Business**
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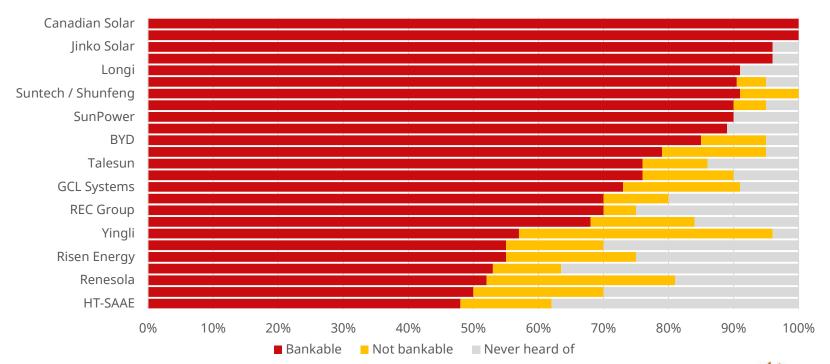
# Leading module and total solutions provider with a track record of delivering high-quality products and services in over 160 countries

- 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

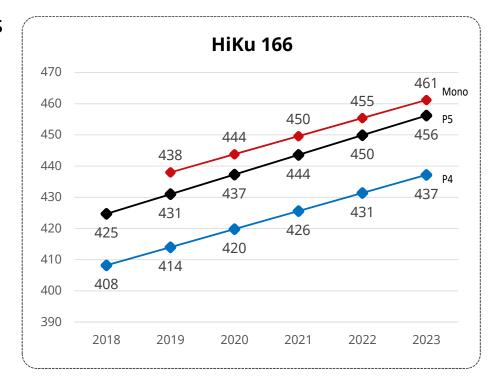


Source: Bloomberg New Energy Finance 2019 Module Bankability Survey. Survey results are used by financial institutions across the world for credit analysis. Respondents include banks, funds, EPC contractors, independent power providers (IPPs) and technical advisors.



## 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
- cells

































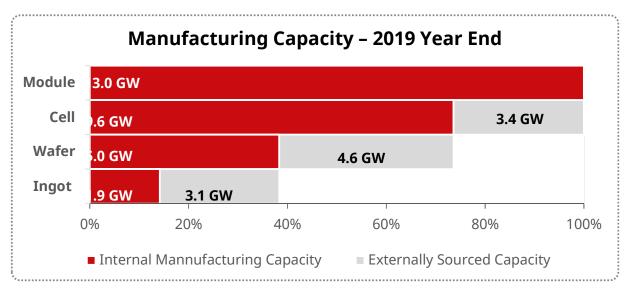


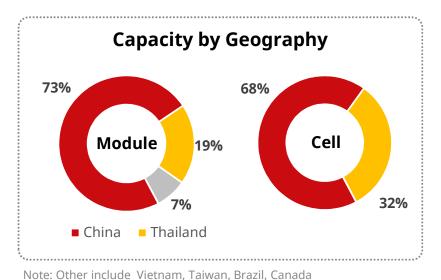




## Technology-agnostic cell and module manufacturing capacity

- 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





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

Canadian Solar
MAKE THE DIFFERENCE

## **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> <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       |

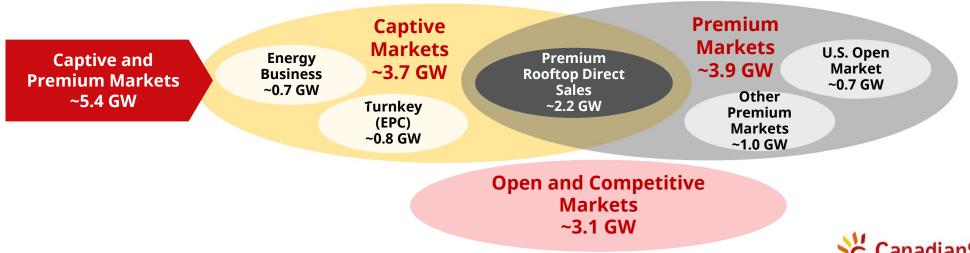
Source: Company filings.

(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

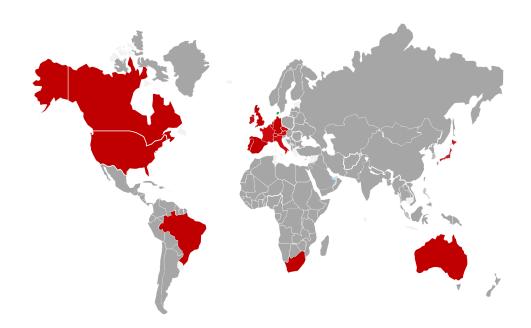
- Captive market opportunity in 2019 totals ~3.7GW
  - Container size direct sales to premium rooftop installers, stable predictable quarterly demand
  - Our own energy business projects
  - Turnkey solutions
- Other premium high price markets in 2019 total ~1.7GW, including U.S.





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

## Markets

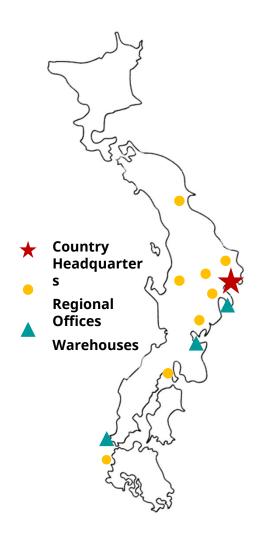


Container-size orders at a premium price Stable and predictable quarterly demand

| Shipment & Market<br>Share | ~2.2 GW in 2019<br>~20% market share in target residential<br>& small commercial markets  |  |  |  |
|----------------------------|---|--|--|--|
| ASP Premium                | 2~3 ¢/W   |  |  |  |
| Target Markets             | Japan, Australia, US, Canada, Brazil,<br>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 3rd 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

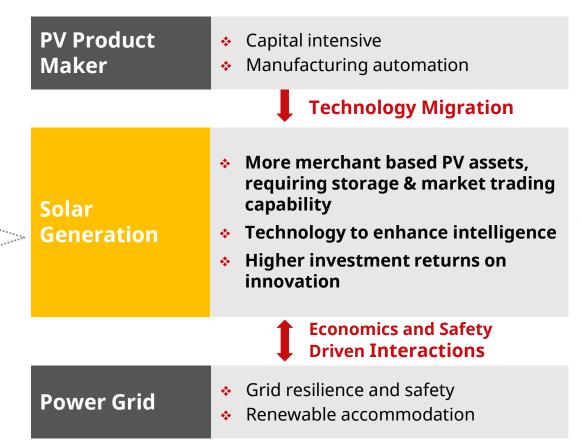


## Opportunity to leverage captive markets to grow our systems solutions and energy storage business (SSES)

System Solutions and Energy Storage (SSES)

#### **Enabling Technologies:**

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







# 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

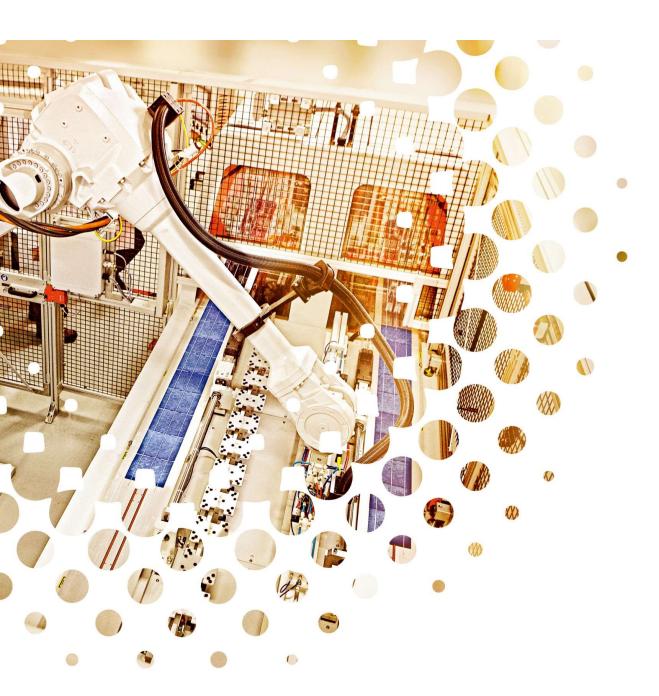
## MSS (Module & System Solutions)

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

Optimized module, inverter, tracker & storage packaged system solutions

MLPEs, inverters, mounting, storage, monitoring





### **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





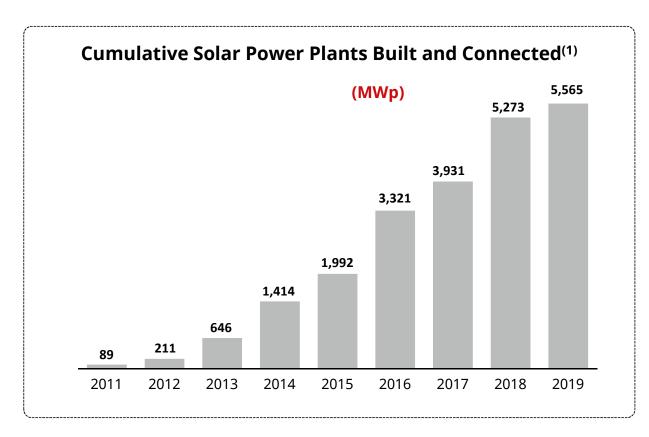


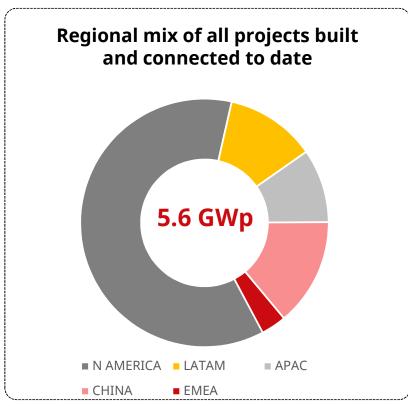






# Track record developing, building and operating solar power plants across major energy markets in 6 continents





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

#### **Project development Project Execution** Monetization **Project Valuation Contract Negotiation** 1. Basic Engineering (production 1. EPC + O&M estimation, CAPEX and OPEX 2. Insurance **Dropdown into Infrastructure Fund** 3. Finance estimation) controlled by Canadian Solar 2. Financial Modeling 3. Risk Assessment **Bridge financing Projects** Memorandum **Alternatively Investment Committeea EPC and Project Management** 1. Engineering 2. Procurement Securing Land and Connection Point **Third Party Sale** 3. Construction 4. Project Management **Permitting Process** OR **Commissioning and Acceptance** Valuation of existing permits and acquisition OR **Project Finance Partnerships**

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





































































Bank of America **Merrill Lynch** 































































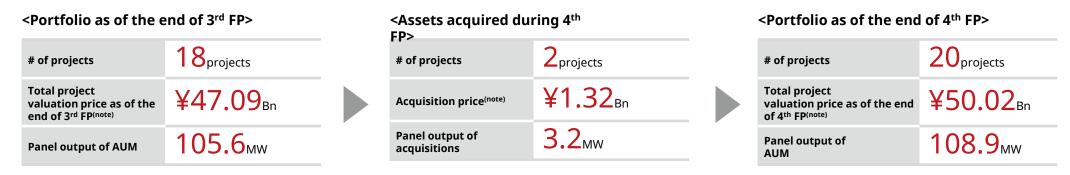




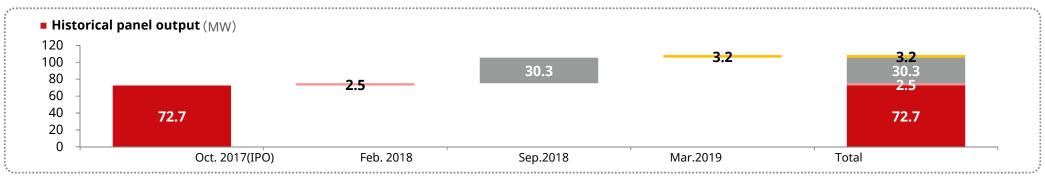


## Success launching Japan's largest solar infrastructure fund

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...

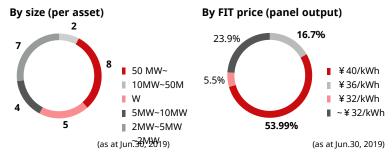


## ... and are expected to grow to 339.5MW in the next few years driven by Canadian Solar dropdowns

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 start year and status of sponsor portfolio assets

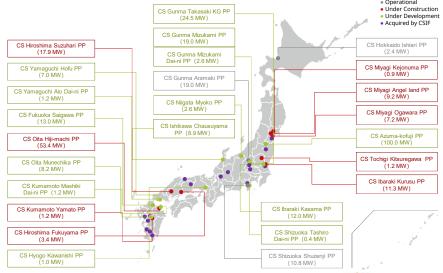


Operational and under construction
12 projects, 137.9 MW

Under development
14 projects, 201.6 MW

ENR projects (Note)
3.90 MW

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.

**CanadianSola** 

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

Early- Mid-stage pipeline

9.0 **GWp** 

Late-stage pipeline/backlog

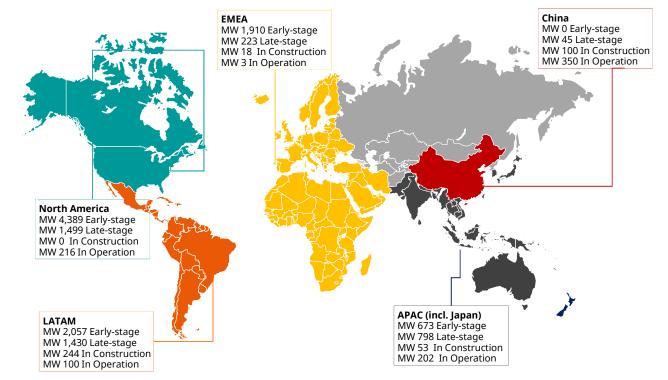
4.0 **GWp** 

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 quarters.

Canadian Solar

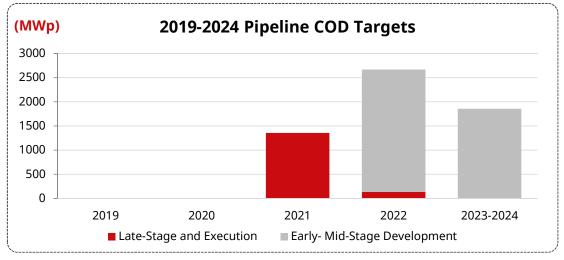
## Strong competitive position in key energy markets – N. America

**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



### **Projects Update**

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

- ❖ 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.

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>D</sub>

In Construction

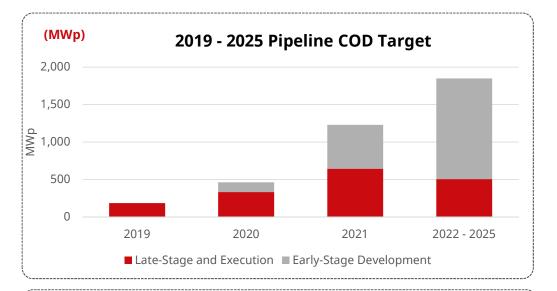
100 MW<sub>D</sub>

In Operation

#### **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.





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## 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



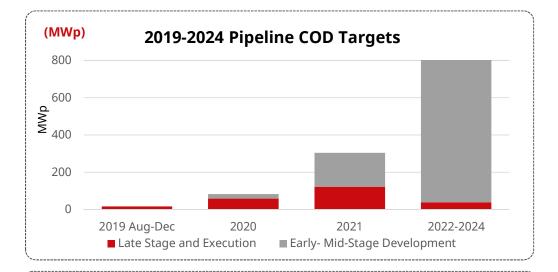
#### **Recently Confirmed Projects**(1):

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

#### **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



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## 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

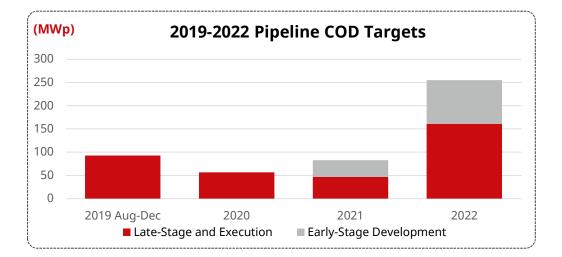
143 MW<sub>P</sub>

In Operation



#### **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



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#### 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

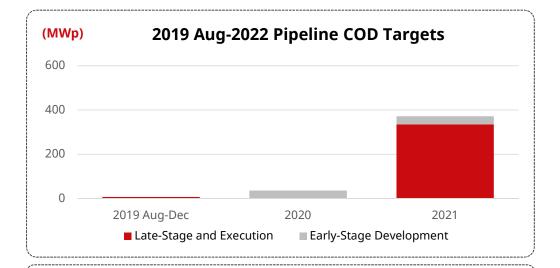
#### **59 MW**<sub>P</sub>

In Operation

#### **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.





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#### **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 lifecycle 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.



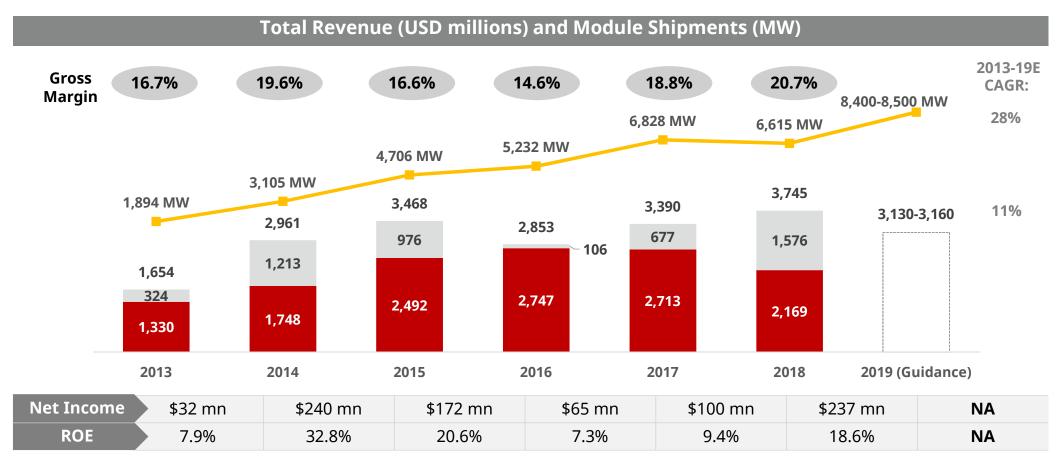


#### **Table of contents**

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



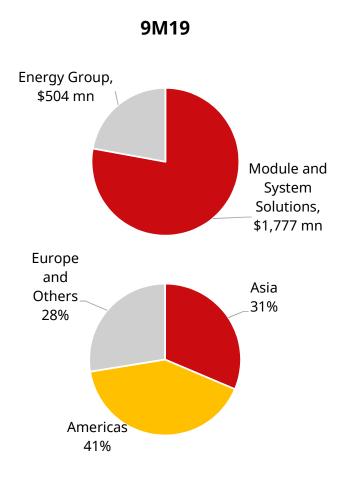
# Resilient business model combining manufacturing operations and downstream total solutions consistently profitable over past 7 years





### **Consolidated Income Statement Summary**

| USD millions except per<br>share data          | 3Q19  | vs.<br>2Q19 | vs.<br>3Q18 | 9M19  | vs.<br>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       |

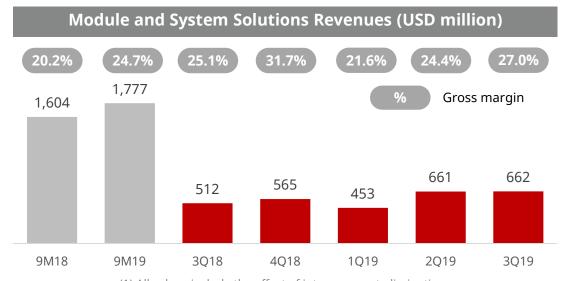


<sup>(1)</sup> EBITDA calculated as operating income after loss/gain on change in fair value of derivatives, FX gain/loss, investment income/loss, and income from minority shareholdings; then adding back depreciation and amortization. For a reconciliation of GAAP to non-GAAP results, see accompanying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



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

| USD millions except<br>shipment data  | 3Q19  | vs.<br>2Q19 | vs.<br>3Q18 | 9M19  | vs.<br>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%        |



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

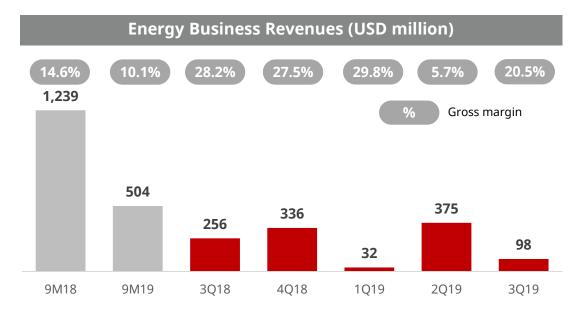
#### **Key highlights**

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

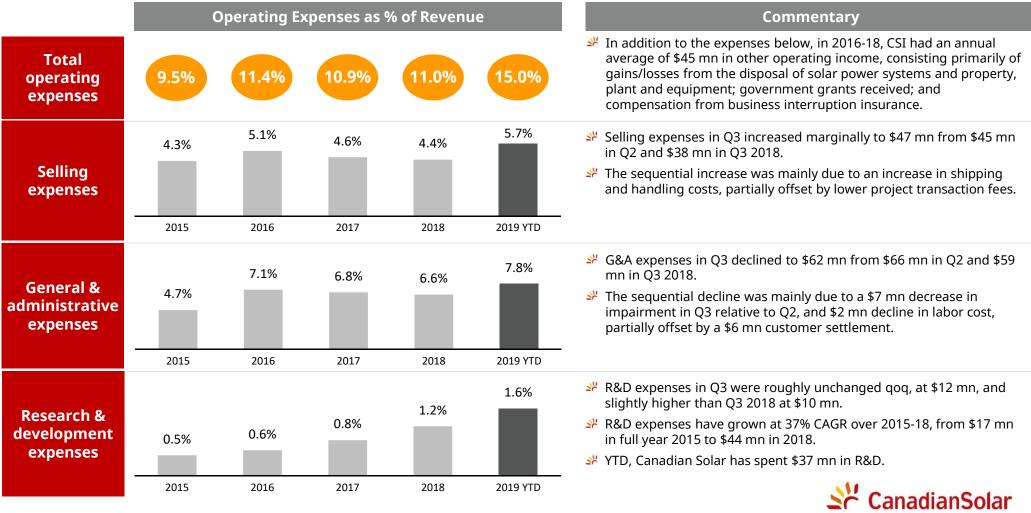


#### **Key highlights**

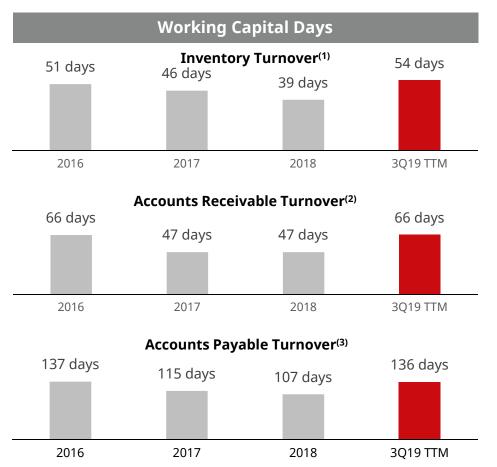
- Lower revenues in Q3 was mainly driven by the delayed closing of project sales in Japan, which are expected to be completed in Q4 2019 and Q1 2020.
- Q3 projects sold included the sale of the 266 MWp Rambler project in the US and the sale of 80% interest in the 172 MWp Lavras project in Brazil, both 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.

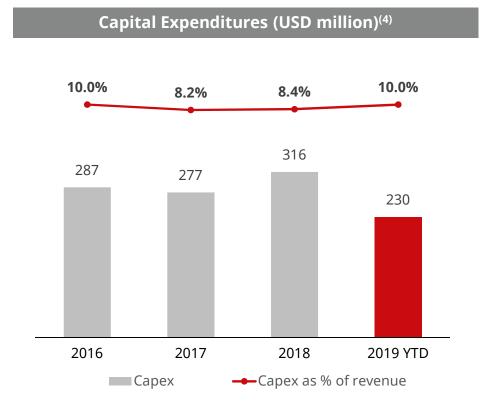


#### Operating expenses



### Disciplined working capital management, disciplined and balanced capex



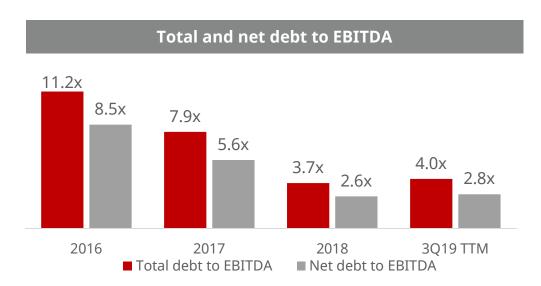


- 1) Inventory turnover days calculated as average gross inventory (adding back provisions) divided by cost of revenues x365
- 2) Account receivables days calculated as average gross accounts receivable (adding back bad debt allowance) divided by total revenues x365.
- 3) Accounts payable days calculated 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 non-recourse debt.
- Deleverage mainly driven by growth in EBITDA and reduction in project debt associated with project sales.

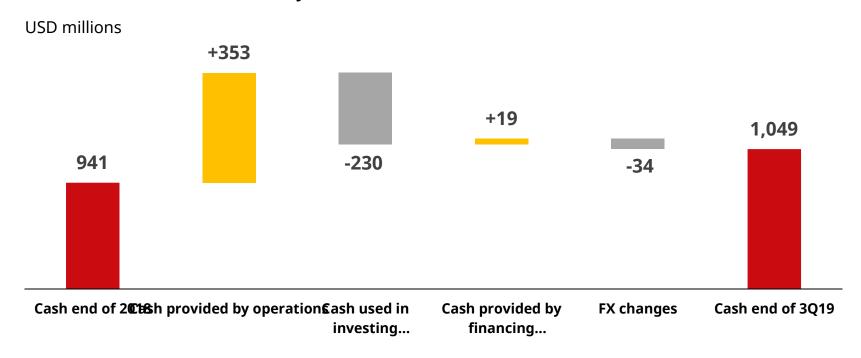




Note: Net debt calculation nets out restricted cash securing debt only.

# 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 | ттм    |  |  |  |  |
| 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<br>(non-GAAP)* | 244  | 33   | 144   | 133  | 554    |  |  |  |  |

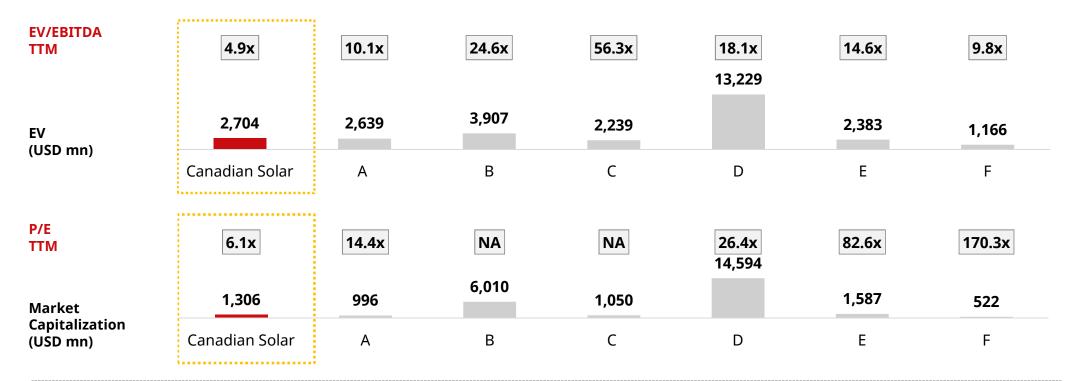
<sup>\*</sup>EBITDA including impairments



- 1. Source: Factset, company filings.
- 2. Prices as at January 3, 2020 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.
- 2. Prices as at January 3, 2020 market close.



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



**Dr. Shawn Qu** Chairman and CEO

- Founded Canadian Solar in 2001, firmly establishing the company as a global leader of the solar industry
- Director & VP at Photowatt International S.A.
- Research scientist at Ontario Hydro (Ontario Power Generation Corp.)



Yan Zhuang
Acting CEO, SVP and
Chief Commercial Officer

- Head of Asia of Hands-on Mobile, Inc.
- Asia Pacific regional director of marketing planning and consumer insight at Motorola Inc.



**Dr. Huifeng Chang**SVP and Chief Financial Officer

- Co-Head of Sales & Trading at CICC US in New York
- CEO of CSOP Asset Management in Hong Kong
- Vice President of Citigroup Equity Proprietary Investment in New York



**Guangchun Zhang** SVP and Chief Operating Officer

- Vice President for R&D and Industrialization of Manufacturing Technology at Suntech Power Holdings
- Centre for Photovoltaic Engineering at the University of New South Wales and Pacific Solar Pty. Limited.



**Ismael Guerrero**CVP and President of Energy Group

- President, Head of Origination and COO at TerraForm Global
- Vice President of Global Projects at Canadian Solar
- Director of Operations for Asia at the Global Sustainable Fund



**Jianyi Zhang**SVP and Chief Compliance Officer

- Senior advisor to several Chinese law firms
- Senior assistant general counsel at Walmart Stores, Inc.
- Managing Partner at Troutman Sanders LLP



**Dr. Guoqiang Xing** SVP and Chief Technology Officer

- Chief Technology Officer of Hareon Solar
- R&D Director of JA Solar
- R&D Director at several semiconductor companies



# **Experienced independent board of directors**

|             | Robert McDermott - Director 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>  |
|-------------|--|---|
| Adviser     | <b>Dr. Harry E. Ruda - Director</b> Chair of Technology, 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<br/>Applied Science and Engineering at the University of Toronto, Canada</li> </ul>  |
| and         | Andrew Wong - Director Chair of the Compensation, 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>   |
| Directors   | Arthur Wong - Director Chair of the Audit Committee, 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>  |
| Independent | Laurie Templeton - Director  | <ul> <li>Founder and President of Templeton &amp; Phillips Capital Management, LLC, a global investing boutique located in Chattanooga, Tennessee.</li> <li>Independent director and member of the Audit Committee of Fairfax Financial Holdings Limited and Fairfax India Holdings Corporation.</li> <li>Ms. Templeton serves on a number of non-profit organizations.</li> </ul>  |
| Inc         | Karl E. Olsoni – Adviser to the Board  | <ul> <li>Operating Partner with Quinbrook Infrastructure Partners, an infrastructure fund manager investing in clean energy infrastructure in the United States, the United Kingdom and Australia.</li> <li>Partner with the kRoad group of companies which invest in battery storage, waste transformation and emobility. Previously served as Managing Director of the Clean Energy and Infrastructure team at Capital Dynamics.</li> </ul> |
|             |  |   |



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

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

| 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   | 9M yoy | 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<br>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** 

CSIQ Nasdaq Listed