

WESTPEAK RESEARCH ASSOCIATION

Canadian Solar Inc. (NASDAQ: CSIQ)

Alternative Energy – Alternative Energy Equipment

Volare For Canadian Solar

March 4th, 2021

Canadian Solar Inc. is a solar power company that designs, develops, and manufactures key solar power products and modules through its MSS and Energy segments for a range of residential, commercial, and industrial applications. It has major production and power facilities in North and South America, Europe, Africa, the Middle East, and APAC.

Thesis

The Company's strong focus on its dual-segment solar energy business model, diverse MSS products, and infrastructure-driven revenues have positioned it well for exponential future growth potential in the dynamic solar energy market. A planned Chinese IPO listing further strengthens Canadian Solar's international prospects, while its vertical integration, multi-industry revenues, and infrastructure leasing allows it to consistently punch well above its weight against larger solar energy competitors.

Drivers

Rapid growth in the international solar market, across a range of residential, commercial and industrial fields, has driven global innovation and demand for renewable energy at all levels of society. As competition grows, the per watt (\$/W) solar energy cost is rapidly falling, recently passing below alternative energy sources. As individuals, companies and governments shift to solar energy, spurred by pan-governmental regulation and ESG interest, Canadian Solar is increasingly well-positioned to capitalize on these global trends.

Valuation

Our analysis is based on a target share price of **\$69**, with a **66.4% upside**. This valuation was made using an adjusted four-way split between perpetuity growth, exit multiple, and EV/EBITDA and PE comps pricing to reflect the uncertainty surrounding the IPO and past frothiness and semi-opaque capital structuring (e.g., 2018 MBO), with a conservative post-Covid economic recovery, Paris Accord green energy spending boost, and future opportunities.

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Equity Research	US
Price Target	CAD\$ 69.00
Rating	Buy
Share Price (Jan. 15 Close)	CAD\$ 41.46
Total Return	66.4%

Key Statistics	
52 Week H/L	\$67.4/\$12.00
Market Capitalization	\$2.448B
Average Daily Trading Volume	\$2.197M
Net Debt	\$846M
Enterprise Value	\$4.274B
Net Debt/EBITDA	2.95x
Diluted Shares Outstanding	\$115.15M
Free Float	76.5%
Dividend Yield	N/A

WestPeak's Forecast			
	2020E	2021E	2022E
Revenue	\$3.43B	\$3.89B	\$4.28B
EBITDA	\$287M	\$399M	\$385M
Net Income	\$151M	\$83M	\$73M
EPS	\$2.49	\$1.36	\$1.20
P/E	11.4x	30.4x	34.4x
EV/EBITDA	4.6x	7.5x	7.3x



Business Overview/Fundamentals



Company Overview

Founded in 2001, Canadian Solar is one of the world's top solar photovoltaic product and solar energy solutions providers with an EV of \$4.24B USD.

Revenue Segmentation

Canadian Solar's revenue model is divided into two distinct segments: Modules and System Solutions (MSS) and Energy. Canadian Solar bundles its products and services into unique turnkey (i.e., ready-to-use) solar energy solutions to achieve exceptional customer value across the entire project life cycle – from initial studies and design to construction and maintenance – to massively reduce cost and complexity for customers.

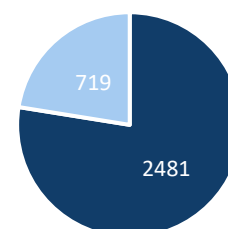
Revenue Growth & Shipments

Canadian Solar revenue growth within the MSS and Energy segments has historically seen year-to-year fluctuations, with significant volatility present in the rapidly-expanding Energy segment. Across both segments, shipment levels have grown significantly (30% to est. 65% CAGR in 2021), with a 900% increase in yearly shipments since 2013. This is an extremely respectable growth rate and positive factor for Canadian Solar, as they are largely reliant on shipments to generate revenues. In total, Canadian Solar has shipped 46 GW to clients in over 150 countries, with a 18 – 20 GW planned in 2021 alone.

Geographic Segmentation

Canadian Solar has a major presence in North America, South America, Europe, Africa, the Middle East, Australia and Asia (APAC), with 14,000+ employees and customers in over 150 countries. Canadian Solar is notably engaged in an ongoing Chinese IPO, with a projected listing in Q4 2021.

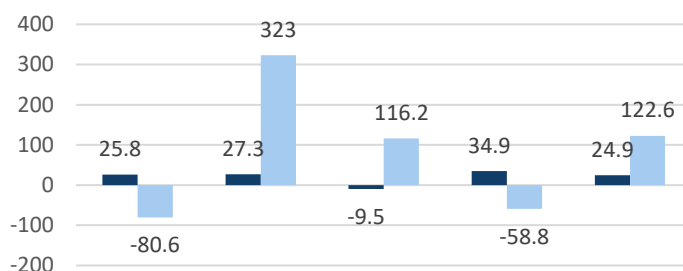
Revenue Segmentation
(FY 2019, USD MM)



■ MSS (78%) ■ Energy (22%)

Source: Investor relations.

Revenue Segment Growth %
(FY16 - FY20)



■ MSS ■ Energy

Source: Company filings.



Source: Investor relations.

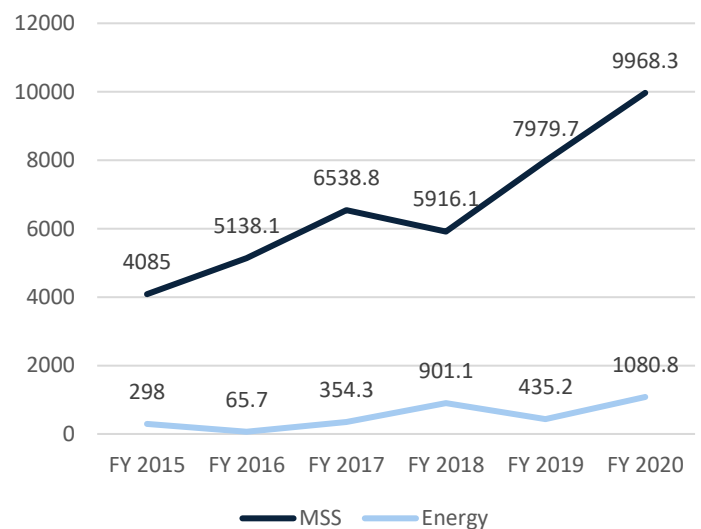
Modules and System Solutions (MSS) Segment

Canadian Solar’s MSS segment is responsible for designing, developing, and manufacturing solar wafers, cells, and other power products for a range of residential, commercial and industrial clients. Canadian Solar’s key products feature superior quality (including a Fraunhofer ISFH-certified poly cell efficiency world record) backed by over 1,500 certified patents. The MSS segment generates strong revenues for Canadian Solar through market-leading vertical production and cost structures. This vertical integration (where Canadian Solar controls most of the aspects of its production process) allows it to better adapt to volatile market conditions, adjusting expenditures and exploiting cost declines at virtually any point along their in-house supply chain. This flexibility is a direct result of Canadian Solar’s focus on direct vertical integration, partnerships and previous purchases (e.g., Recurrent Energy).

Energy Segment

Canadian Solar’s Energy segment is responsible for its large-scale solar power projects. These responsibilities include Engineering, Procurement and Construction (EPC) and Operation and Maintenance (O&M). By bundling virtually every step in the project life cycle, Canadian Solar generates immense value for clients, ranging from individual consumers searching on online forums such as EnergySage to massive municipal utility projects such as Solarpark Meuro (the largest solar farm

Power Products Sold MW
(FY15 - FY20)



Source: Company filings.

in Germany and POWER-GEN International Solar Project of the Year). Canadian Solar has cumulatively provided 52 gigawatts (GW) of solar energy infrastructure and equipment (sufficient to sustainably power approximately 13 million households), with a further 16.3 GW of solar products and 6 GW of storage products in the development pipeline. While the Energy segment does not currently command the same scale as the MSS segment, it represents a significant and steadily growing revenue source for Canadian Solar.

Business Strategy

LCOE & Energy Market

Across both its MSS and Energy segments, Canadian Solar is currently pursuing a strategy of long-term growth in the energy market, where the Levelized Cost of Energy (LCOE; average net present cost of electricity generation over the life of a plant) and Power Purchase Agreement (PPA; contract between energy buyer and seller) have already fallen below the cheapest fossil fuel alternatives. With massive vertical integration and a global presence, Canadian Solar is extremely well-positioned to take advantage of the global shift toward sustainable solar energy.

Modules & Total System Solutions

Since its inception, Canadian Solar has held positions in developing markets and is well positioned to capitalize on these market changes and others. The massive growth of renewable energy demand and capacity across virtually every continent has enabled Canadian Solar to rapidly expand its project roster and pipeline, with 539 MWp worth of plants in operation, 1.3 GWp in production, a 3.8 GWp backlog and massive 11.2 GWp pipeline. With the majority of operational capacity in China (259 MW), South America (100 MW) and a further 178 MW across Japan and several other Asian Pacific nations, Canadian Solar has primarily expanded its project pipeline in North America (5,299 MW in construction, backlog and pipeline) and a further 3,010 MW across Europe, Africa and the Middle East. This significant commitment is well-aligned with the post-Paris Accord efforts of nations in these regions to divest from conventional energy sources (particularly pollutants such as fossil fuels and coal).

ESG & Corporate Social Responsibility

As a major solar energy company, Canadian Solar is a key environmental player and green investment. As of Q2 2020, Canadian Solar's 46 GW shipped solar modules generate 57,911,103 MWh per year and resulting 44 million tons of CO₂ reduction per year, equivalent to planting 36,252,502 trees (according to studies by the US Department of Energy). The modules result in reductions in GHG CO₂ (39 million metric tons), SO₂ sulphur dioxide (23,000 metric tons), NO_x nitrogen oxides (23,390 metric tons), PM particulate matter 2.5 (2,760 metric tons) and H₂O water usage (676.2 billion gallons). This strong focus on socially responsible governance and business strategy makes Canadian Solar an extremely attractive buy for ESG-oriented investors, setting it apart in a heavily green-leaning industry.

Chinese IPO

In July 2020, Canadian Solar announced that they would be seeking to list its MSS segment in a Chinese IPO listing (Q2 – Q4 2020) on either the Shanghai Stock Exchange's Science and Technology Innovation Board (STAR Market) or the Shenzhen

Stock Exchange's ChiNext Market. The IPO would require the conversion of the listed element into a joint Sino-foreign stock. The listing is intended to improve market share for both the MSS and Energy segments. For the MSS segment, the IPO is intended to extend market capacity and vertical integration, improving pricing power, control costs and profitability. For the Energy segment, the IPO is intended to develop localized large-scale project investment vehicles while retaining partial ownership in specific solar projects. The massive investment and expansion potential present in the Chinese market – by far the world leader in terms of added and cumulative solar capacity at over 25% and 35% respectively. With a rapidly growing solar capital base and a lack of so-called “Made in China” stigma and accompanying regulatory issues, the IPO opens the doors for Canadian Solar to establish a much stronger base. On the domestic side, the IPO grants Canadian Solar a higher degree of flexibility in terms of where and how to manufacture and expand its base of production, with lower costs.

IPO Timeline

The IPO is expected to proceed along the following timeline:

July – September 2020

IPO Announcement & Pre-IPO Closing

- *IPO announced.*



Q4 2020

Shareholder System Reform

- *Including governance documents and registration materials.*



Q1 2021

Prospectus & Financial Documents



Q2 – Q4 2021

Regulatory & Stock Exchange Process,
Roadshow/PDIE & Official Listing

- *Including application to regulatory authorities and stock exchange and post-application feedback process.*



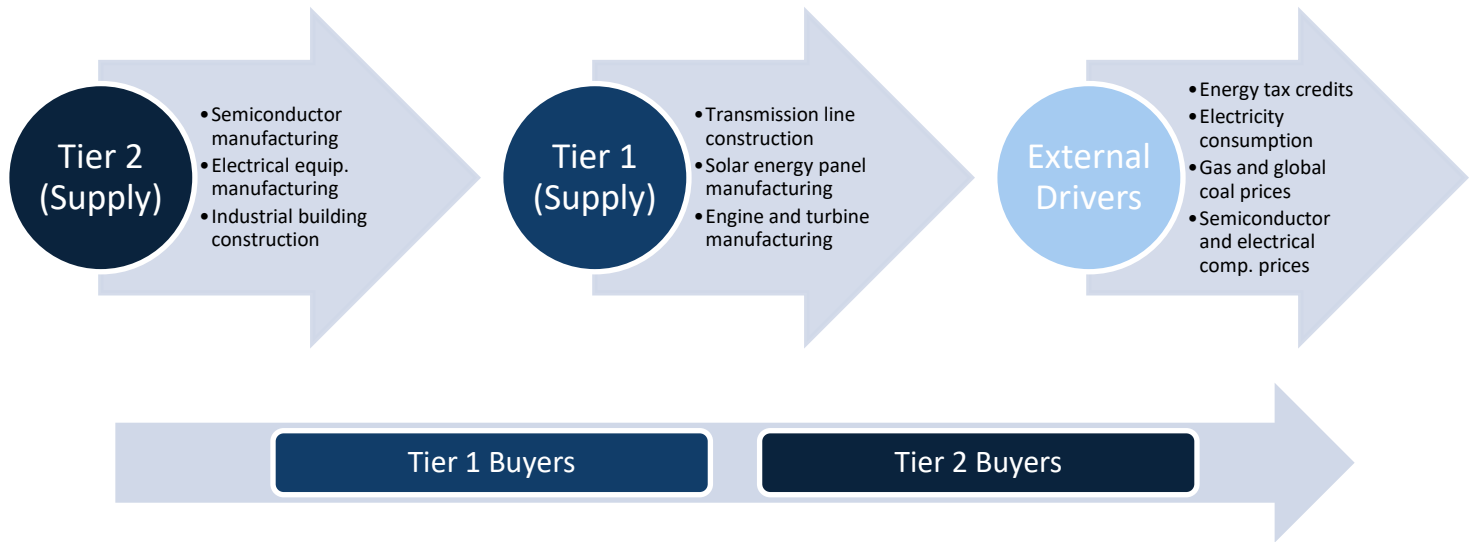
Source: *Investor relations.*

Industry Analysis

Solar energy and power companies in the residential, commercial and industrial fields typically design, manufacture and sell photovoltaic (PV) solar products (based on silicon ingots, wafers, cells and modules) and supporting technologies, and/or construct and operate solar utility-scale power infrastructure (with shipments defined around a project pipeline and

often measured in MW or GW). Most companies are based in the United States or China, with a strong concentration of raw materials extraction and manufacturing located in China. The degree of integration varies widely from company to company, but virtually every solar producer relies on a robust raw material supply chain and capital-intensive manufacturing base. There is a strong precedent (particularly for larger, multi-segment companies such as JinkoSolar) to vertically integrate, absorbing multiple stages of the PV design and manufacturing process.

US Solar Industry Contributing Factors

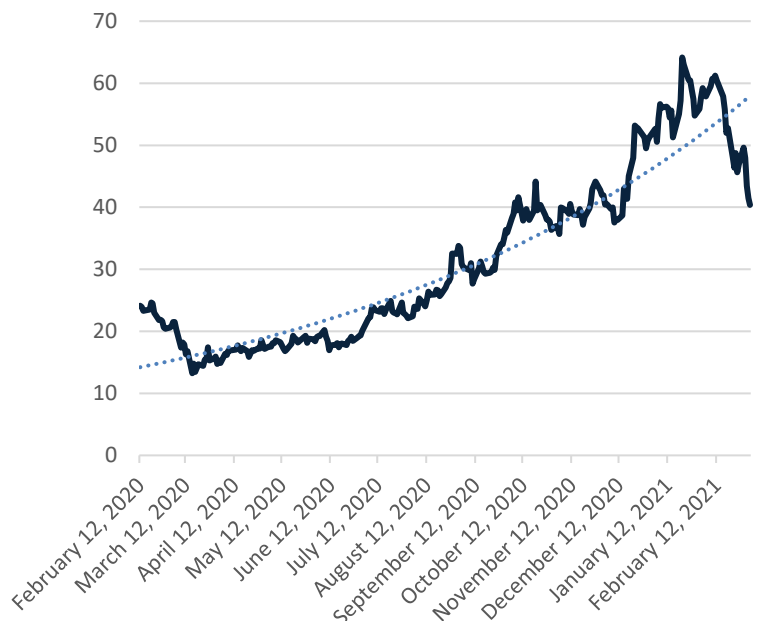


Source: IBISWorld.

COVID-19 Impact

While the socio-economic impact of Covid-19 and a muted resurgence of anti-renewable governments have impacted global solar energy growth, the market is highly resilient and is expected to continue growing. Canadian Solar share prices were largely immune to the early 2020 market drops, rapidly increasing in value through to Q3 2020. This trend was seen across many solar competitors and is unlikely to slow any time soon; while the IEA estimates that global energy demand will decrease by 5%, solar energy is expected to grow by 7%. Auctioned renewables capacity set a record 15% growth over the previous period and many solar energy companies posted record stock prices. Through 2020, Canadian Solar followed closely to this trend, with stock prices rising from \$12.00 (Q1

CSIQ Share Prices (Q1 - Q3 2020)



to \$67.4 (Q3) in 2020 thanks to consistently strong earnings and growth in its module delivery. While muted earnings and high raw materials costs have cut earnings and driven CSIQ to previous 2020 levels, Canadian Solar retains significant staying power and longterm growth potential (with share prices up 2,000% from \$3.00 in 2013). This long-term growth and resiliency are made even more remarkable in an industry characterized by extended project duration, significant fixed costs and considerable FX exposure. These factors are somewhat offset by the Canadian Solar’s medium size (and corresponding agility) and extensive vertical integration, reducing reliance of intermediary suppliers and single markets.

Global Renewables Market

Fuelled by primarily by growth in the US and China, expansions in the global energy market are almost entirely driven by renewables (approximately 90%) such as solar, hydroelectric and wind. While supply chain and production disruption has reduced some estimated growth potential, Canadian Solar and other companies have continued to outperform, with Canadian Solar maintaining its promised 18 – 20 GW deliveries in 2021 – a bold and significant increase over its current years’ delivery (10 – 12 GW).

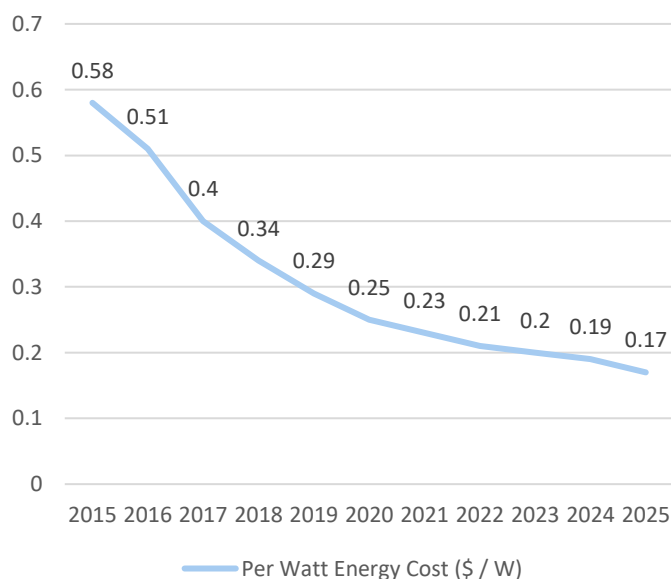
Shipment Growth (GW)



Source: Company filings.

Outside traditional renewable markets such as the US, Europe and China, growth in India and the Middle East has continued at a rapid pace. Many capacity auction deadlines have been waived or extended, contributing to the record 10% projected global renewable capacity expansion in 2021. The rapidly falling per watt cost of solar energy – Canadian Solar’s average prices fell 50% from \$0.58 to \$0.29 per watt – makes solar an increasingly attractive option in developing countries, particularly those with consistent periods of sun, air pollution, limited space, and rapidly growing energy needs. India’s solar additions are estimated to double in 2021, with many of its neighbours seeing similar surges in growth. Based on a slowing growth evaluation (following steady current trends), we anticipate that per watt energy costs for solar energy will fall below \$0.20 by 2025 or before.

Per Watt Energy Cost (\$ / W)

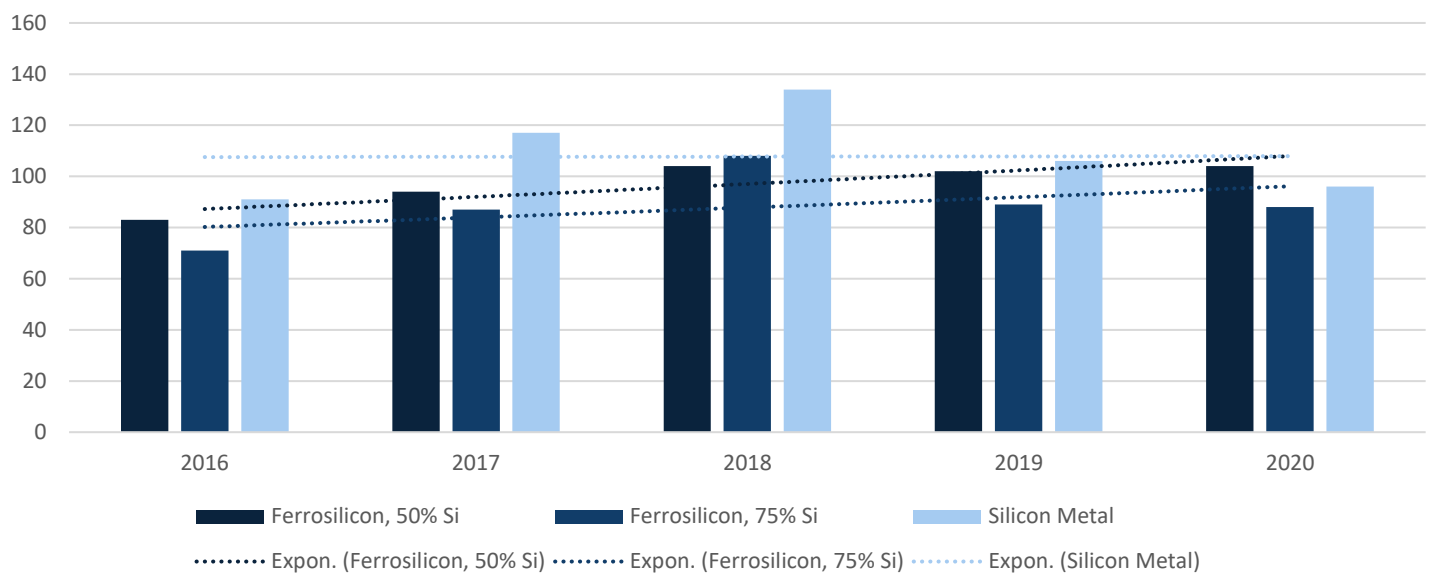


Source: Company filings.

Raw Materials & Resources

Regardless of scale or application, solar cells are typically made from a combination of three key materials: silicon, metal, and glass. Thanks to its conductive nature, silicon (typically in mono or polycrystalline cell form) is an excellent catalyst for the photovoltaic effect - the process of converting of solar energy to electric energy. These silicon cells are in turn connected to batteries or electrical systems via a range of wires and housed in metal (typically aluminum) and glass casing. While the scale and complexity of solar systems can range from rooftop residential panels to billion-dollar power infrastructure projects, the panel function and structure remains largely the same; the same is true for required materials.

Average US Silicon Prices (FY2016 - FY2020), US Cents / Lb



Source: Statista.

While the overall manufacturing and production process is relatively safe, there have been concerns about worker safety – particularly in the mining industry (typically quartz), where silicosis is an active concern. Chemical disposal and leaks (typically acids or chlorides used in the manufacturing process), such as the leak suffered by Canadian Solar competitor JinkoSolar. in 2011, can also have a considerable environmental impact. The requirement for rare earth elements such as cadmium (typically extracted from zinc mines) can have negative health impacts in exposure, and there have been concerns about the wellbeing and safety of both workers and miners (particularly in developing nations). While recent cost increases have cut into Canadian Solar’s bottom line, its multinational production line and vertical integration have increased both the perceived and actual standard of its products. This is particularly important for renewable energy sources and it serves as a keystone strength for the Company.

Investment Thesis

Canadian Solar is a proven, reliable solar equity with exponential growth potential and a strong vertical business model that grants it a greater degree of agility, resiliency, and depth than many similar competitors. While current share prices have

suffered a decline, Canadian Solar is no stranger to temporary slips in value – and meteoric rises (i.e., Q1 – Q3 2020); it weathered the initial COVID-19 financial decline with minimal impact and achieved record share prices and earnings. With its relatively stable earnings (and consistent modest to impressive overperformance, exceeding EPS estimates in Q4 2019 to Q3 2020), promising Chinese IPO, and rapid projected MW shipment growth through the coming years, Canadian Solar is well-positioned to capitalize on the post-COVID economic recovery and ongoing migration to solar energy, which is poised to eclipse many conventional energy industries in everything from profitability and costs to ESG benefits. While nearsighted investors may be discouraged by the current post-December decrease in share price, Canadian Solar promises firm and stable future growth at a bargain current price that will only increase as resource costs and economic stimuli come into effect. At even our conservative valuation and future earnings estimates, Canadian Solar has a truly bright and sunny future.

Chinese IPO

The Chinese listing allows Canadian Solar to position itself directly in the Chinese sphere, arguably the largest and most robust solar energy market on the planet. With a considerable Chinese Canadian board presence and significant existing exposure in the Chinese market, Canadian Solar is well-placed to capitalize on a successful IPO. If the listing is successful, it will free up Canadian Solar to operate more effectively in Asia and refocus its separate business units. This will inevitably prompt further expansion to its existing infrastructure projects. Furthermore, it will broaden Canadian Solar's exposure and mitigate the effects of further anti-renewable regulatory efforts in more conservative markets such as the US and Brazil. These Canadian Solar bastions have seen recent pushback against renewable energy under pro-oil and coal administrations, though the US Biden administration has taken steps to roll back many of his predecessor's policies in this area.

Module Shipments

Module shipment and project completion across the MSS and energy segments will be a key revenue driver for Canadian Solar into 2021 and beyond. As Covid-19 pandemic recovery and renewed Paris Accord-era climate goals come into play, governments and organizations will renew extant solar energy development projects. Shipments are a key revenue driver and among the greatest contributors to its strong earnings performances have been the consistent growth markers in its solar power products sales. We anticipate that total power products sold will exceed 18,000 MW, a 60% total increase in line with company projections. As the Company continues to meet and exceed these ambitious module sales targets, Canadian Solar will almost certainly see the same rapid share price value surges that historically accompanied such releases.

Energy Segment & Vertical Integration

The quality considerations, efficiencies, and cost-saving measures related to Canadian Solar's vertical integration model will be a key factor in competing against larger regional and international competitors such as JinkoSolar, who employ a similar dual revenue model and degree of vertical integration. By incorporating multiple supply and production line stages into their internal process, Canadian Solar ensures a continued quality product and competitive moat, with reduced reliance on third-party suppliers and manufacturers. In the future, this will only serve to insulate and support Canadian Solar.

Environmental/Social Governance & CSR

Many businesses in the Xinjiang region (and in China at large) have come under intense scrutiny due to possible human rights violations relating to the presence of forced labour in the regional workforce. While Canadian Solar has a strong

legacy of ESG involvement beyond its business model, it will be essential for them to display current and future commitment to ESG and CSR initiatives to successfully operate simultaneously in the Chinese and international markets.

Catalysts

Catalyst I: Q1 2021 Earnings Report & IPO Issuance

Canadian Solar currently faces muted earnings expectations for its Q4 2020 earnings report (February 18th, 2021), which have played a part in the current share price drop seen over the past two months. Strong post-2020 quarterly earnings (in tandem with the ongoing IPO) will likely trigger a renewal of trust and overall course correction (as they have consistently done so), as investors return to capitalize on the historically consistent performance and lower pre-IPO prices.

Catalyst II: Q4 2021 Earnings Report & MSS Shipment Targets

Canadian Solar has made significant promises for its future MW shipments (see Module Shipments). Once the IPO listing has taken place, the true indicator for long-term performance and share price growth will be largely measured in their ability to meet these goals over next 3 – 4 quarters (particularly after they have entered the denser, choppy and highly competitive Asian capital and solar energy markets). Canadian Solar's high COGS (with heavy capital investments and fixed costs in previous years) necessitates consistent, perpetually expanding sales.

Catalyst III: Q1 2022 – 2025 Earnings Report & Energy Targets

Canadian Solar's long-term objectives revolve around a greater degree of growth and market presence from their burgeoning Energy segment, which already beats many competitors in terms of complexity and scale (GW). As energy facility development and construction plays a larger role in Canadian Solar operations, so too will its impact on annual earnings reports. Canadian Solar will likely rely on their Energy segment to further differentiate and compete with larger rivals, and its strength will be an essential element of evaluating the company's future value.

Management Team

Dr Shawn Qu, Founder, Chairman and Chief Executive Officer

Dr. Shawn Qu founded Canadian Solar Inc. in October 2001 and has served as the company's president and CEO since then. Dr. Qu has decades of experience in executive positions, engineering, and solar energy. He previously served in senior executive positions with Automation Tooling Systems Inc (ATS) and subsidiaries Matrix and Photowatt International S.A. Previously, Dr. Qu worked with Ontario Hydro in the development of proprietary Spheral Solar technology. Since founding Canadian Solar, Dr. Qu has led the company for almost



two decades – from its NASDAQ listing to its current Chinese IPO – positioning Canadian Solar as one of the world’s leading solar energy companies. Dr. Qu is also a member of the Research and Development Committee.

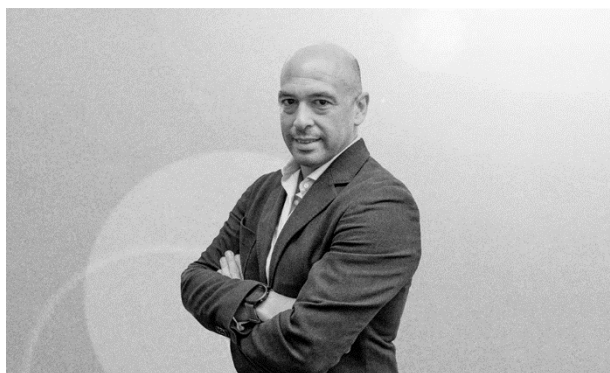
Dr. Huifeng Chang, Senior Vice President and Chief Financial Officer

Dr. Huifeng Chang has served joined Canadian Solar in May 2016 (and the BOD in September 2020). Dr. Chang previously worked in the capital markets as a senior finance executive with the China International Capital Corporation (CICC), CSOP Asset Management Limited, Citigroup Equity Proprietary Investments, and the Kamakura Corporation. In addition to his exceptional financial background, Dr. Chang also has a PhD in Soil Physics, an MBA (University of Hawaii), and a MSc (Academia Sinica).



Ismael Guerrero, Corporate Vice President and President of the Energy segment

Ismael Guerrero has served as Corporate Vice President and President of the Energy business since July 2019. He has previously served in senior TerraForm Global and SunEdison. He also previously served as Canadian Solar’s Vice President of Global Projects. Mr. Guerrero has both Bachelor and MSc degrees in Industrial Engineering (University of Seville) and is a graduate student (Yale University) and General Management Program (Harvard Business School) graduate.



Management Compensation

In addition to a share incentive plan, Canadian Solar paid its directors approximately \$7.2 million in salaries, bonuses, and other remunerations during 2019 (data currently unavailable for 2020). The Company paid approximately \$0.6 million to its independent directors and approximately \$6.6 million to its executive officers.

Shareholder Base, Liquidity, Market Depth

Shareholder Base

Canadian Solar currently has a 45,049,345 free float (76%). The Company’s ownership is primarily comprised of investment managers (44.1%) and brokerage firms (4.2%), along with a range of nine strategic entities (23.7%) including two holding companies and seven key individuals (23.7%). Founder, Chairman and CEO Dr. Shawn Qu is by far the majority stakeholder, holding almost a quarter (23.51%) of the stock outstanding (with a current value of approximately \$712M USD).

Investor	OS %	Position	Type	Country
Qu (Shawn Xiaohua)	23.51	13,877,824	Strategic Entity / Individual	China
BlackRock Advisors (UK)	4.14%	2,441,925	Investment Managers	England

Invesco Capital Management LLC	3.87%	2,285,761	Investment Managers	US
BlackRock Asset Management (Ireland)	2.64%	1,560,160	Investment Managers	Ireland
The Vanguard Group, Inc.	2.61%	1,543,739	Investment Managers	US
Morgan Stanley & Co. LLC	2.46%	1,452,929	Brokerage Firm	US
BlackRock Institutional Trust Company	1.77%	1,046,860	Investment Managers	US
Lion Point Capital, L.P.	1.49%	881,017	Investment Managers	US
Norges Bank Investment Management	1.35%	798,457	Investment Managers	Norway

Source: Thomson One.

Liquidity

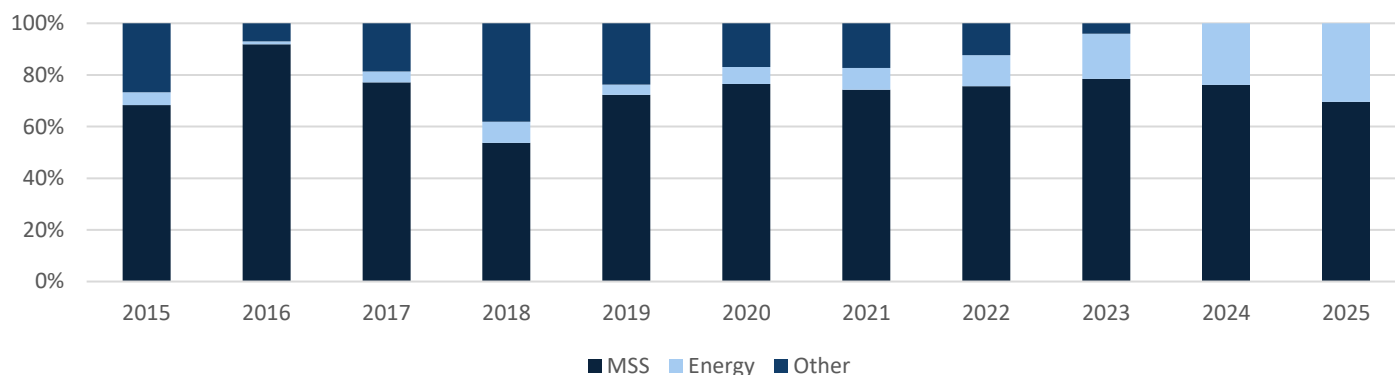
Canadian Solar has an average daily trading volume of 2,374,538. Major liquidity spikes historically occur around key financial releases (particularly when shipments have exceeded expectations) and the sale of major infrastructure assets. Thanks to the Company's significant market capitalization and respectable free float (76%), liquidity should not be a significant issue. The Chinese listing will also increase liquidity and open new revenue streams and cost-reducing measures for the Company in the Asian markets.

Valuation

Discounted Cash Flow (DCF) Assumptions

Overall, our valuation methodology in determining a DCF valuation stemmed from several core assumptions based on Canadian Solar's resiliency in earnings and response to the demands and new costs imposed by the Covid-19 pandemic and imminent Chinese IPO. Most notably, past stability in performance was reflected into future projections, as the Company had demonstrated relatively stable earnings and growth in its operations and expansions. Canadian Solar has never paid dividends (and made no indication they will do so); as such, they have not factored into our projections.

10-Year Revenue Forecast (FY2015 - FY2025)



MSS Segment

Due to the large-scale and involved nature of the Company's operations, we have held Canadian Solar's MSS growth relatively constant at 25% (in line with previous years). This segment historically sees little change; however, we estimate that it will contract slightly (approximately 5% reduction) in 2021 and 2022 as Canadian Solar focuses on developing its energy segment in new and existing markets before recovering to pre-expansion levels as improved manufacturing and lower per watt costs increase demand (particularly in residential markets).

Energy Segment

This segment has historically seen more variable, fluctuating growth (as it ties to individual project completion and expansion). As Canadian Solar moves into new record growth in its module and project delivery, we projected a 125% short term increase followed by a steadier EV representation between 25% - 30%. We feel this short-term increase is absolutely in line with previous growth, which tends to feature large increases (as high as 323%) and decreases (-80.6%) based on the current project roster and completion rate.

Other Segments

Other segment growth represents the difference between the MSS and energy segment to better recognize projects that encompass (or fall beyond the bounds) of these segments. It also uses the EV format to account for the large fluctuations present in the project-based revenue model. To accommodate the high variability, we used an EV method that roughly corresponds to the period-to-period changes, with a value between 15% - 20%. All segments (total revenue) sees an approximate 10% growth, roughly in line with company projections and the expected value of past periods.

Average Selling Price Per Watt (\$ / W)

The price reduction per watt follows a relatively steady trajectory, from 0.58 to 0.17 in our projections. There is a brief bump in the approximately 12% – 15% reduction to reflect the increasing cost of materials and shipping (an impact of Covid-19) during the 2020 – 2021 period.

CAPEX, PPE & COGS

The capital-intensive nature of the industry, and the Company's past proclivity toward capital purchases and expansion, led to the relatively conservative 25 – 30% estimates for capital and PPE growth, with a resting 5-year useful life as a reflection of related past periods. This capital-intensive process has contributed to the Company's relatively lean margins and COGS of roughly 80%. These costs appeared to be decreasing prior to Covid-19, and our model reflects a gradual return to the previous decrease trajectory (currently in the 75% - 80% range) once supply bottlenecks decrease.

Margins & Taxes

In terms of margin analysis and projection, we have held Canadian Solar's margins roughly consistent with past trends, with SG&A seeing a consistent 15% (in line with marginal growth), R&D increasing slightly from 1.5% to 2% into the mid 2020s, and other revenues held relatively constant at 0.5% - 1%. The tax rate is also held constant (relative to past years), with a 15% rate gradually rising to 20% to reflect the continued shift into new markets. This lower number is intended to reflect the presence of tax subsidies, which have previously led to low (or even negative) tax figures.

Working Capital

Similarly, working capital has been adjusted in accordance with previous trends. Overall, our analysis has been conservatively in line with past trends and a pragmatic post-Covid approach, which results in a slightly lower overall valuation than some other analyses. Specifically, this translates to a hump-shaped increase and subsequent decrease in AR and inventories, with inverted prepaid expenses as previous expenses are used more rapidly in the short-term and later replenished as costs fall into the early mid-2020s. This same hump is applied to AP and accrued liabilities, both of which have been historically higher (and prone to moderate variability). We estimate that Canadian Solar will see greater AP turnover and a reduction in liabilities as economic conditions improve (and future shipping targets are met, creating additional liquidity). Overall, these estimates are in line with past trends.

EBIT

For our analysis, interest income and other expenses have been held at constant EV rates to reflect an approximation of past trends. We feel this approach, which takes into consideration individual periods and repeating quarter-to-quarter trends, best reflects and accounts for the variability inherent in these figures.

Comparable Company Analysis

For this analysis, the following companies have been selected based on comparable business model, scope and operations.

SunPower Corporation (NSDQ: SPWR)

SUNPOWER[®]

SunPower Corporation is a leading producer of residential and commercial solar energy generation and storage services, such as the Equinox residential solar platform (based on AC panel architecture) and EnergyLink monitoring system. Through the EnergyLink system, SunPower has invested heavily in ensuring that residential consumers are able to easily install and access data from their solar power system. SunPower also offers the complementary InvisiMount residential mount system and pre-engineered Helix commercial products with plug-and-play stations, cable management systems, and mounting hardware. As with the Equinox residential platform, the Helix system is designed for minimal installation time and business disruption. SunPower's revenue is approximately split between its Technologies (53%) and Energy Services (47%) segments. In the past month, SunPower shares have tumbled from \$54 the end of January to \$35, with a subsequent Hold recommendation, after missing key Q4 revenue and sales projections.

First Solar, Inc. (NSDQ: FSLR)

First Solar is a top producer of photovoltaic (PV) solar energy technology. Like Canadian Solar, First Solar designs and sells PV solar technology and develop and constructs PV solar power systems. Revenue is evenly divided into Systems (52%) and Modules (48%) segments, with most sales (87%) in the United States and Australia (5%). The Modules segment designs and manufactures cadmium telluride (CdTe) systems, while the Systems segment covers the development, construction, and operation of large-scale solar power systems. These Systems sites typically rely on CdTE technology built by the Modules segment. Like Canadian Solar, First Solar also engage in extensive Operations & Management (O&M) operations to add value for facility and system



clients. Like SunPower, First Solar has seen an ongoing drop in share price from \$107 in mid January to a current \$81 hinging on President Biden's decision to repeal a series of Trump-era tariffs on imported crystalline silicon solar cell technology, with foreign companies likely to benefit.

JinkoSolar Holding Co. Ltd. (NYSE: JKS)



JinkoSolar is the world's largest photovoltaic (PV) solar panel producer. Like Canadian Solar, JinkoSolar manufactures a range of residential, commercial, and industrial solar power products through a vertically integrated value chain including silicon ingots, wafers, cells, and modules. Solar modules make up by far the most of their revenues (96%), with the sale of wafers and cells (3%) and power generation (>1%) making a limited degree of income. Unlike Canadian Solar and many competitors, JinkoSolar has only a single segment focusing entirely on this development and production process and selling JinkoSolar products directly to clients across China (17%), North America (25%), APAC (25%), Europe (17%) and other regions (15%). While JinkoSolar has a relatively even international modules sales presence, it has limited international facility capacity, with only two sites (in Latin and South America) as part of its Engineering Procurement Construction (EPC) and energy processing services. Like many other solar companies, JinkoSolar has seen a drop in share value from \$72 in December 2020 to a current \$51 valuation. However, this price will likely rise significantly with the easing of silicon solar tariffs in the United States, threatening domestic North American companies such as First Solar.

SolarEdge Technologies, Inc. (NSDQ: SEDG)



SolarEdge Technologies produces inverter solutions for PV systems, with products such as the SolarEdge Power Optimizer, SolarEdge Inverter, StorEdge Solutions and SolarEdge Monitoring Software. Within its Solar revenue segment (94%), SolarEdge generates revenues through a range of power optimizers and inverters, monitoring systems, storage, and smart energy management platforms. Like SunPower's EnergyLink, SolarEdge optimizers provide energy management services including Maximum Power Point (MPP) tracking and real-time current and voltage adjustments. The basic SolarEdge product includes a DC optimizer, inverter and a cloud-based monitoring system operating in tandem. These products are sold to clients in the US (48%), Netherlands (14%), Europe (24%) and other regions (14%).

Sunrun Inc. (NYSE: RUN)



Sunrun Inc. is a leading developer and producer of US residential solar energy systems. Sunrun operates a dual-segment business structure, based around its solar systems and products (55%) and customer agreements and incentives (45%), through which it provides solar energy technologies to its clients. Unlike many competitors, Sunrun operates exclusively within the residential solar energy market in the United States, with approximately 134,000 in 16 states and the District of Columbia. Sunrun sells its products via phone, in-field canvassing, and strategic retail partners, with a range of lease and purchase agreements. Sales include service and installation offerings, with a range of panels, inverters, and rack systems sold to both residential clients and resellers.

Enphase Energy Inc. (NYSE: ENPH)



Enphase Energy, Inc. designs, develops, and sells semiconductor-based microinverter systems for PV solar platforms. Enphase's microinverters (consisting of a proprietary microinverter, AC battery, Envoy gateway, and cloud-based Enlighten software system) convert DC electricity to AC electricity at the individual solar module through custom digital architecture,

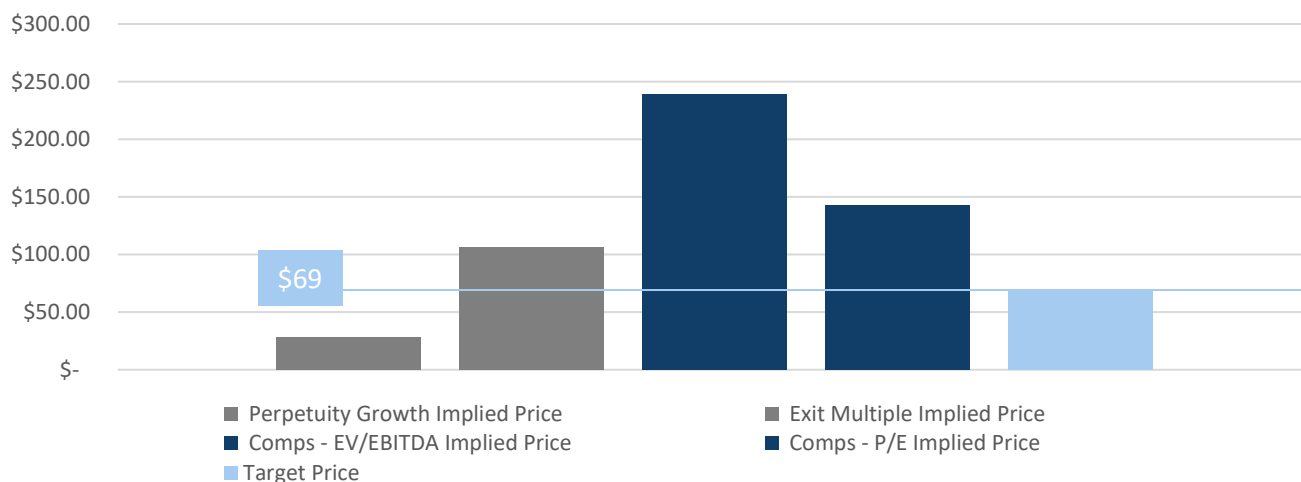
software and hardware systems, and Application Specific Integrated Circuits (ASIC). The Envoy bi-directional gateway collects and sends solar energy data to the Enlighten software suite, allowing users to remotely monitor and manage Enphase systems (like similar SunPower and SolarEdge systems). These microinverter systems are sold across the United States (82%) and other regions (18%), with all sales under the sole Solar Photovoltaic segment.

Recommendation

Buy: \$69.00

Based on our analysis, we believe that Canadian Solar represents an opportunity for forward-looking investors – provided that the IPO and future earnings are positive, and that current trends toward solar and renewable energies continue. Additional analysis on major revenue sources indicates strong growth opportunities, in new markets and beyond. With its Chinese IPO and consistent record-breaking quarters in terms of solar module shipments, Canadian Solar represents a slow-burn potential buy, particularly if this current trajectory continues.

Adjusted Weighted Target Price



The high growth and expansion in comparable companies creates extreme fluctuation in EV/EBTIDA and P/E values, which have been addressed through adjustment to the target price to create a reliable and highly feasible conservative estimate that is free from inflationary pressure and in line with more conservative post-COVID estimates. Even at this conservative target price, a Canadian Solar investment suggests returns in excess of 60% - well in line with past increases. Over 2020 alone, Canadian Solar share prices rose over 100% despite COVID-19 market contraction and soaring resource costs.

Risks

Negative IPO Outcomes

As Canadian Solar ventures more fully into the Chinese capital market in search of new funding opportunities, it runs the risk of greater exposure to international regulatory, currency and market volatility issues. The Chinese tech markets such as the Shanghai STAR exchange (one of the exchanges Canadian Solar is considering) have a reactionary and choppy history prone to panicked “mom and pop” retail selloffs, FX shifts (and, arguably, manipulation) and the constant spectre of draconian government clampdowns. There are concerns, particularly for a Canadian company in a post-US trade war world, that Chinese authorities may exercise undue influence or pressure on foreign companies, with further concerns of market fairness (with overt support for domestic rivals). Depending on the opacity and success of the IPO through 2022 and beyond, Canadian investors may be worried about the future direction of the company and seek solar energy stocks elsewhere. This greater exposure to a less established market may open investment to further uncertainty.

Xinjiang Polysilicon Supply & Involuntary Labour

As Canadian Solar has expanded its influence and infrastructural presence in foreign solar energy markets, it has seen increasing pressure and regulatory exposure (from government policy) across the political spectrum – particularly when operating in nations and regions in apparent opposition to domestic (Canadian) policies and political ideals. Earlier in 2021, Canadian Solar denied suggestions in a Globe & Mail report stating that forced labour was present in energy production facilities and polysilicon supply chains related to its 30 MW, 100-hectare Tumxuk solar farm in Xinjiang, China.

The mineral, coal and fossil fuel-rich northwestern Xinjiang region – which has suffered periods of separatist religious-ethnic extremism and persecution between a Muslim Uyghur and Turkic minority and the ruling Han majority under the auspices of the Xinjiang Uyghur Autonomous Region (XUAR) government – is heavily involved in the global solar energy raw materials manufacturing supply chain. China produces more than 70% of the world’s polysilicon, with 67% of the world’s top polysilicon producers and more than 35% of the global supply originating in the region. Currently, the Xinjiang region is under intense international scrutiny due to the presence of mass Uyghur detention centres (with an estimated 1-3 million inmates) – ostensibly “counter-extremism training centres” set up by the XUAR and CCP in the wake of the 2009 Ürümqi riots. The Globe & Mail highlighted evidence from a second Horizon Advisory consultancy report stating that 60-plus Uyghur “surplus labourers” were working in a Xinjiang subsidiary of global polysilicon manufacturer GCL Poly, which signed a 2019 agreement to supply Canadian Solar and three other companies.

On February 22nd, the Canadian House of Commons voted to declare that the Chinese government is committing genocide against Uighurs and Turkic Muslims in the Xinjiang region. Canadian Solar has issued statements declaring that the one employee and six subcontractors at Tumxuk are all ethnic Han and that the Canadian Solar supply chain is free of forced labour. However, international attention to the alleged detention, re-education and torture of Ughur and Turkic Minorities by the Chinese government in the Xinjiang region will likely affect any Canadian organization doing business with either. The US has banned cotton, fruit and vegetable imports from the Xinjiang region, and it is possible that similar measures would be enacted by North American and European governments were the situation to worsen. The Canadian government has already announced a “Xinjiang Integrity Declaration” for Canadian companies seeking FTC support in China. Furthermore, there are legitimate concerns that Canadian investors and shareholders – concerned about the ongoing humanitarian crisis in the region – will be wary of investing further as Canadian Solar seeks closer ties with Chinese government, exchanges and investors with its IPO and expansion plans.

Supply Chain & Resource Costs

As a manufacturer with a complex supply chain, Canadian Solar has seen significant inflationary pressure, particularly on its raw materials costs, from a range of factors. These include rising materials and shipping costs, primarily in plastics, silicon and glass. Polysilicon costs rose an estimated 66% during Q3, while glass rose an estimated +75% during the same period. This impact was largely felt across the industry, with little reprieve for companies or consumers. While other companies will also face global shortages and price shifts, Canadian Solar may be worse off compared to larger, more connected competitors – even when accounting for the resiliency granted by its vertical integration model. Management has also highlighted rising freight and shipping costs as possible causes for caution, particularly over the 2020 and 2021, with an estimated 10% margin impact. While Canadian Solar has strong vertical integration and numerous product lines and infrastructure projects, there are concerns as to whether they will be able to maintain a long-term competitive advantage in a rapidly growing global industry, with major players and growing consolidation. CSIQ is not the largest in its field (notably smaller than many other established rival firms) and is more vulnerable than some competitors (with deeper supply chains).

Negative FX Changes

With a substantial global presence, Canadian Solar faces significant pressure from FX changes, particularly in USD. Since Canadian Solar typically focuses on large, multi-year infrastructure development, maintenance and management projects, these longer time horizons make it difficult to pull out or shift efforts in the short term to avoid or adjust to negative FX changes. Longterm, this may shape its global reach and vision, and influence which countries it decides to invest in.

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Appendix 1: Summary

Summary Page											
	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22	Dec-23	Dec-24	Dec-25
(Figures in mm USD)	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Income Statement											
Revenue	3,467,626.0	2,853,078.0	3,390,393.0	3,744,512.0	3,200,583.0	3,424,526.0	3,892,846.9	4,282,131.6	4,817,398.1	5,540,007.8	6,371,009.0
EBITDA	341,588.0	189,013.0	368,618.0	493,913.0	418,602.0	287,159.0	398,518.3	385,391.8	554,000.8	858,701.2	987,506.4
Net Income	173,316.0	65,275.0	102,983.0	242,431.0	166,555.0	150,471.1	82,900.8	73,282.3	162,180.1	347,643.3	392,845.7
Earnings Per Share	\$ 2.87	\$ 1.12	\$ 1.67	\$ 3.89	\$ 2.74	\$ 2.49	\$ 1.36	\$ 1.20	\$ 2.67	\$ 5.72	\$ 6.46
Cash Flow Statement											
Capital Expenditures	(642,768.0)	(1,111,488.0)	(310,675.0)	(316,282.0)	(291,182.0)	(74,173.8)	(315,708.1)	(503,525.1)	(594,439.3)	(685,353.6)	(822,424.3)
Acquisitions	(196,783.0)	-	(12,561.0)	-	-	-	-	-	-	-	-
Divestitures	3,615.0	1,899.0	-	337,773.0	1,649.0	-	-	-	-	-	-
Dividend Payment	-	-	-	-	-	-	-	-	-	-	-
Dividend Per Share	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Dividend Payout to Earnings	-	-	-	-	-	-	-	-	-	-	-
Dividend Payout to Core FCF	-	-	-	-	-	-	-	-	-	-	-
Dividend Yield	-	-	-	-	-	-	-	-	-	-	-
Balance Sheet											
Current Assets	2,264,093.0	3,790,763.0	4,085,303.0	3,074,321.0	3,252,936.0	4,552,981.7	4,169,060.1	4,384,906.4	3,822,642.5	3,127,392.4	3,051,697.0
Non-Current Assets	2,153,161.0	1,615,843.0	1,804,324.0	1,818,337.0	2,214,271.0	2,296,035.6	2,401,271.6	2,681,007.8	2,995,710.9	3,338,387.7	3,749,599.9
Assets	4,417,254.0	5,406,606.0	5,889,627.0	4,892,658.0	5,467,207.0	6,849,017.3	6,570,331.7	7,065,914.2	6,818,353.5	6,465,780.1	6,801,296.9
Current Liabilities	2,656,324.0	3,721,066.0	4,108,012.0	2,948,357.0	3,091,997.0	4,070,226.3	3,791,540.7	4,287,123.2	4,039,562.5	3,686,989.1	4,022,505.9
Non-Current Liabilities	928,420.0	786,150.0	721,840.0	671,456.0	950,152.0	1,207,011.0	1,207,011.0	1,207,011.0	1,207,011.0	1,207,011.0	1,207,011.0
Liabilities	3,584,744.0	4,507,216.0	4,829,852.0	3,619,813.0	4,042,149.0	5,277,237.3	4,998,551.7	5,494,134.2	5,246,573.5	4,894,000.1	5,229,516.9
Shareholders' Equity	818,968.0	884,681.0	1,032,226.0	1,225,473.0	1,393,134.0	1,511,143.1	1,594,043.9	1,667,326.2	1,829,506.3	2,177,149.6	2,569,995.3
Cash	553,079.0	511,039.0	561,679.0	444,298.0	668,770.0	2,010,843.1	1,154,515.4	1,316,090.4	603,334.8	8,196.3	(350,558.9)
Debt	1,156,576.0	1,600,033.0	1,957,755.0	1,293,697.0	1,219,293.0	1,303,834.0	1,303,834.0	1,303,834.0	1,303,834.0	1,303,834.0	1,303,834.0
Net Debt	603,497.0	1,088,994.0	1,396,076.0	849,399.0	550,523.0	(707,009.1)	149,318.6	(12,256.4)	700,499.2	1,295,637.7	1,654,392.9
Minority Interests	13,542.0	14,709.0	27,549.0	47,372.0	31,924.0	314,858.0	314,858.0	314,858.0	314,858.0	314,858.0	314,858.0
Debt/EBITDA	1.8 x	5.8 x	3.8 x	1.7 x	1.3 x	n/a	0.4 x	n/a	1.3 x	1.5 x	1.7 x
Operating Metrics											
Return on Equity (ROE)	21.2%	7.4%	10.0%	19.8%	12.0%	9.3%	-	-	-	-	-
Return on Assets (ROA)	3.9%	1.2%	1.7%	5.0%	3.0%	2.1%	-	-	-	-	-
Return on Invested Capital (ROIC)	-	-	-	-	-	-	-	-	-	-	-
Valuation Metrics											
Stock Price (High)	\$ 40.08	\$ 28.80	\$ 19.09	\$ 17.97	\$ 25.89	\$ 44.86	\$ 41.46	\$ 41.46	\$ 41.46	\$ 41.46	\$ 41.46
Stock Price (Low)	\$ 14.16	\$ 10.25	\$ 10.86	\$ 11.37	\$ 14.00	\$ 12.00	\$ 41.46	\$ 41.46	\$ 41.46	\$ 41.46	\$ 41.46
Stock Price (Average)	\$ 27.12	\$ 19.53	\$ 14.98	\$ 14.67	\$ 19.95	\$ 28.43	\$ 41.46	\$ 41.46	\$ 41.46	\$ 41.46	\$ 41.46
Diluted Shares Outstanding (Average)	60,426.1	58,059.1	61,548.2	62,291.7	60,777.7	60,383.9	60,829.1	60,829.1	60,829.1	60,829.1	60,829.1
Market Capitalization (Average)	1,638,754.6	1,133,603.2	921,683.7	913,818.8	1,212,211.1	1,716,714.6	2,521,973.4	2,521,973.4	2,521,973.4	2,521,973.4	2,521,973.4
Enterprise Value (Average)	2,255,793.6	2,237,306.2	2,345,308.7	1,810,589.8	1,794,658.1	1,324,563.5	2,986,150.0	2,824,574.9	3,537,330.6	4,132,469.1	4,491,224.3
P/E	9.5 x	17.4 x	8.9 x	3.8 x	7.3 x	11.4 x	30.4 x	34.4 x	15.6 x	7.3 x	6.4 x
EV/EBITDA	6.6 x	11.8 x	6.4 x	3.7 x	4.3 x	4.6 x	7.5 x	7.3 x	6.4 x	4.8 x	4.5 x
FCF Yield to Market Capitalization	-16.8%	-121.9%	-1.3%	-2.9%	25.0%	79.4%	-27.3%	12.1%	-18.6%	-5.5%	6.0%
FCF Yield to Enterprise Value	-12.2%	-61.8%	-0.5%	-1.5%	16.9%	102.9%	-23.1%	10.8%	-13.3%	-3.3%	3.4%
Free Cash Flow											
EBIT	247,371.0	93,164.0	269,345.0	364,657.0	258,879.0	237,709.8	188,046.3	161,602.9	274,264.6	516,024.4	576,294.2
Tax Expense	(50,155.0)	(22,380.0)	(31,540.0)	(56,061.0)	(13,118.0)	(27,098.9)	(21,437.3)	(18,422.7)	(31,266.2)	(58,826.8)	(65,697.5)
D&A	94,217.0	95,849.0	99,273.0	129,256.0	159,723.0	49,449.2	210,472.0	223,788.9	279,736.2	342,676.8	411,212.1
Capital Expenditures	(642,768.0)	(1,111,488.0)	(310,675.0)	(316,282.0)	(291,182.0)	(74,173.8)	(315,708.1)	(503,525.1)	(594,439.3)	(685,353.6)	(822,424.3)
Changes in NWC	76,204.0	(437,346.0)	(38,146.0)	(147,959.0)	188,979.0	1,176,917.7	(751,091.7)	441,311.2	(398,052.5)	(252,461.8)	52,456.9
Unlevered Free Cash Flow	(275,131.0)	(1,382,201.0)	(11,743.0)	(26,389.0)	303,281.0	1,362,803.9	(689,718.7)	304,755.2	(469,757.2)	(137,940.9)	151,841.5
Valuation Summary											
Current Price	\$ 41.46										
Target Price	\$ 68.99										
Total Return	66.4%										
Recommendation	BUY										
DCF Valuation											
Perpetuity Growth Implied Price	\$ 27.94										
Exit Multiple Implied Price	\$ 106.57										
Comps Valuation											
Comps - EV/EBITDA Implied Price	\$ 239.09										
Comps - P/E Implied Price	\$ 143.19										

Appendix 2: Discounted Cash Flow Analysis (DCF)

Discounted Cash Flow Analysis															
(Figures in mm USD)	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20	Dec-20	Dec-21	Dec-22	Dec-23	Dec-24	Dec-25
	FY2015	FY2016	FY2017	FY2018	FY2019	Q1-2020	Q2-2020	Q3-2020	Q4-2020	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
WACC Calculations															
Cost of Equity															
Risk-free rate	0.8%														
Expected market return	10.7%														
Market Risk Premium	9.9%														
Beta	1.22														
Cost of Equity	12.9%														
Cost of Debt															
Pre-tax cost of debt	0.4%														
Effective tax rate	11.4%														
Cost of Debt	0.3%														
WACC															
Market value of equity	2,521,973.4														
Market value of debt	1,303,834.0														
Total Capitalization	3,825,807.4														
Cost of equity	12.9%														
Cost of debt	0.3%														
WACC	8.6%														
Free Cash Flow															
EBIT	247,371.0	93,164.0	269,345.0	364,657.0	258,879.0	113,436.0	45,468.0	59,047.0	19,758.8	237,709.8	186,046.3	161,602.9	274,264.6	516,024.4	576,294.2
Less: Tax expense	(60,155.0)	(22,389.0)	(31,540.0)	(96,061.0)	(13,118.0)	23,067.0	(7,160.0)	(6,731.4)	(2,252.5)	(27,098.9)	(21,437.3)	(18,422.7)	(31,286.2)	(58,826.8)	(65,697.5)
Add: Depreciation and amortization	94,217.0	95,849.0	99,273.0	129,256.0	159,723.0	-	-	-	49,449.2	49,449.2	210,472.0	223,788.9	279,736.2	342,676.8	411,212.1
Less: Capital expenditures	(642,768.0)	(1,111,488.0)	(310,675.0)	(316,282.0)	(291,182.0)	-	-	-	(74,173.8)	(74,173.8)	(315,708.1)	(503,525.1)	(594,439.3)	(685,353.6)	(822,424.3)
Less: Change in net working capital	76,204.0	(437,346.0)	(38,146.0)	(147,959.0)	188,979.0	-	-	-	1,176,917.7	1,176,917.7	(751,091.7)	441,311.2	(398,052.5)	(252,461.8)	52,456.9
Unlevered Free Cash Flow	(275,131.0)	(1,382,201.0)	(11,743.0)	(26,389.0)	303,281.0	142,503.0	38,308.0	52,315.6	1,169,699.3	1,362,803.9	(689,718.7)	304,755.2	(469,757.2)	(137,940.9)	151,841.5
Discount factor	-	-	-	-	-	-	-	0.25	0.50	0.50	1.50	2.50	3.50	4.50	5.50
Present Value of Unlevered Free Cash Flow	-	-	-	-	-	-	-	51,250.0	1,122,531.7	1,173,761.7	(667,002.5)	248,069.4	(352,163.3)	(95,238.5)	96,551.4
Discounted Cash Flow Valuations															
Perpetuity Growth Method															
Perpetuity Growth Rate	2.0%														
PV sum of unlevered FCF	403,998.2														
Terminal value	1,496,614.7														
Enterprise Value	1,900,612.9														
Add: Cash	1,102,927.0														
Less: Debt	1,303,834.0														
Less: Other EV adjustments	-														
Equity Value	1,699,705.9														
Shares outstanding	60,829.1														
Implied Share Price	\$ 27.94														
Current Price	\$ 41.46														
Implied Price	\$ 27.94														
Total Return	-32.6%														
Exit Multiple Method															
Terminal EV/EBITDA Multiple	10.0 x														
PV sum of unlevered FCF	403,998.2														
Terminal value	6,279,255.403														
Enterprise Value	6,683,253.6														
Add: Cash	1,102,927.0														
Less: Debt	1,303,834.0														
Less: Other EV adjustments	-														
Equity Value	6,482,346.6														
Shares outstanding	60,829.1														
Implied Share Price	\$ 106.57														
Current Price	\$ 41.46														
Implied Price	\$ 106.57														
Total Return	157.4%														
Perpetuity Growth Rate vs WACC															
Perpetuity Growth Rate			WACC												
			9.00%	9.40%	8.90%	8.40%	7.90%								
	1.00%	\$ 20.24	\$ 21.68	\$ 23.32	\$ 25.20	\$ 27.37									
	1.50%	\$ 21.33	\$ 22.93	\$ 24.77	\$ 26.90	\$ 29.37									
2.00%	\$ 22.56	\$ 24.36	\$ 26.44	\$ 28.86	\$ 31.72										
2.50%	\$ 23.95	\$ 25.99	\$ 28.36	\$ 31.16	\$ 34.50										
3.00%	\$ 25.55	\$ 27.87	\$ 30.61	\$ 33.89	\$ 37.85										
Terminal EV/EBITDA Multiple vs WACC															
Terminal EV/EBITDA Multiple			WACC												
			9.00%	8.50%	8.00%	7.50%	7.00%								
	8.0 x	\$ 84.20	\$ 86.26	\$ 88.37	\$ 90.55	\$ 92.80									
	9.0 x	\$ 94.31	\$ 96.62	\$ 99.00	\$ 101.46	\$ 103.99									
	10.0 x	\$ 104.41	\$ 106.99	\$ 109.84	\$ 112.37	\$ 115.16									
	11.0 x	\$ 114.52	\$ 117.35	\$ 120.27	\$ 123.27	\$ 126.37									
12.0 x	\$ 124.63	\$ 127.71	\$ 130.90	\$ 134.18	\$ 137.66										

Appendix 3: Comparable Company Analysis

(Figures in mm USD)

Company	Ticker	Share Price	Shares Outstanding	Equity Value	Cash	Debt	Other EV Adjustments	Enterprise Value	EV/EBITDA Multiple			PIE Multiple								
									2020A EBITDA	2021E EBITDA	2022E EBITDA	2020A EV/EBITDA	2021E EV/EBITDA	2022E EV/EBITDA	2020A Diluted EPS	2021E Diluted EPS	2022E Diluted EPS	2020A PIE	2021E PIE	2022E PIE
SunPower Corp.	(NSDQ: SPWR)	\$ 35.39	170.2	6,022.0	324.70	942.5	3.2	6,643.0	24.4	31.8	123.9	272.3 x	208.9 x	53.6 x	(0.6)	\$ (0.18)	\$ 0.31	(56.2 x)	(196.6 x)	114.2 x
First Solar, Inc.	(NSDQ: FSLR)	\$ 86.97	106.0	9,217.1	1,630.90	460.3	-	8,046.5	589.5	687.9	678.6	13.6 x	11.7 x	11.9 x	3.8	\$ 3.64	\$ 3.45	22.7 x	23.9 x	25.2 x
JinkoSolar Ltd.	(NYSE: JKS)	\$ 50.41	45.3	2,283.1	850.30	3,718.2	359.0	5,510.0	442.9	468.1	491.7	12.4 x	11.8 x	11.2 x	3.1	\$ 3.42	\$ 4.33	16.2 x	14.7 x	11.6 x
SolarEdge Tech. Inc.	(NSDQ: SEDG)	\$ 295.98	51.2	15,157.1	1,199.70	615.4	-	14,572.8	230.6	305.2	415.7	63.2 x	47.7 x	35.1 x	4.0	\$ 4.62	\$ 6.25	74.6 x	64.1 x	47.4 x
Sunrun Inc.	(NYSE: RUN)	\$ 60.33	197.5	11,917.0	276.10	2,865.1	895.1	15,401.1	(17.2)	78.9	220.0	n/a	195.2 x	70.0 x	(0.1)	\$ 0.28	\$ 0.41	(670.3 x)	215.5 x	147.1 x
Enphase Energy Inc.	(NYSE: ENPH)	\$ 170.89	126.3	21,588.5	661.80	376.8	-	21,303.5	209.6	321.0	445.6	101.6 x	66.4 x	47.8 x	1.3	\$ 1.83	\$ 2.53	136.7 x	93.4 x	67.5 x
Canadian Solar Inc.	(NSDQ: CSIQ)	\$ 41.46	60.8	2,522.0	1,102.9	1,303.8	-	2,722.9	287.2	396.5	385.4	9.5 x	6.8 x	7.1 x	2.9	\$ 1.66	\$ 2.08	14.3 x	25.0 x	19.9 x
Median												57.1 x	41.4 x						44.0 x	57.5 x
Mean												90.3 x	38.3 x						35.8 x	68.8 x
High												208.9 x	70.0 x						215.5 x	147.1 x
Low												11.7 x	11.2 x						(196.6 x)	11.6 x
Median												\$ 370.50	\$ 259.20						\$ 73.00	\$ 119.50
Mean												\$ 586.16	\$ 239.09						\$ 59.46	\$ 143.19
High												\$ 1,365.28	\$ 440.22						\$ 357.67	\$ 306.06
Low												\$ 73.33	\$ 67.69						-\$ 326.37	\$ 24.22