



LOW-CARBON MANUFACTURING OF SOLAR GLASS

September 2024





Introduction

Canadian Premium Sand Inc. (“CPS” or “the Company”) is a public company listed on the TSX-Venture Exchange

Building North America’s first integrated solar glass manufacturing facility
(Industry currently dependent on Asia Pacific glass producers)

Significant, growing demand for patterned solar glass
(62% of production contracted, an additional 170% of demand in MOUs)

Developing a low-carbon facility with a long-term cost advantage
(Strategically located, renewable energy supply, integration of sand resource)

Pre-construction development complete, financing process underway
(Shovel-ready status achieved, led by an experienced management team)

Compelling project economics, with phased growth potential
(Phase 1 EBITDA of \$170-\$190mm, unlevered pre-tax IRR >18%)





Financing Progress & Plan

- ✓ CPS has received indications for up to \$272 million in federal and provincial incentives in September of 2024 to support the financing process

Capital Requirement	Millions	Notes
Construction Cost	\$880	Fixed price EPC contract
Government of Canada Support	(\$100)	Non-dilutive financial support
	(\$100)	Potential investment through Indigenous Loan Guarantee program*
Province of Manitoba Support	(\$40)	Low interest loan from Government of Manitoba**
	(\$32)	Quarry access road investment by Manitoba Infrastructure
Remaining Capital Need	\$608	
Long-term Debt	\$440	Assuming approx. 50% of construction capital
Remaining Equity Need	\$168	
Total Other Sources	\$608	

* Indigenous Loan Guarantee Program is a federal program proposed in Budget 2024 and CPS is working with stakeholders to seek up to \$100 from the program to allow indigenous investment and participation in the project.

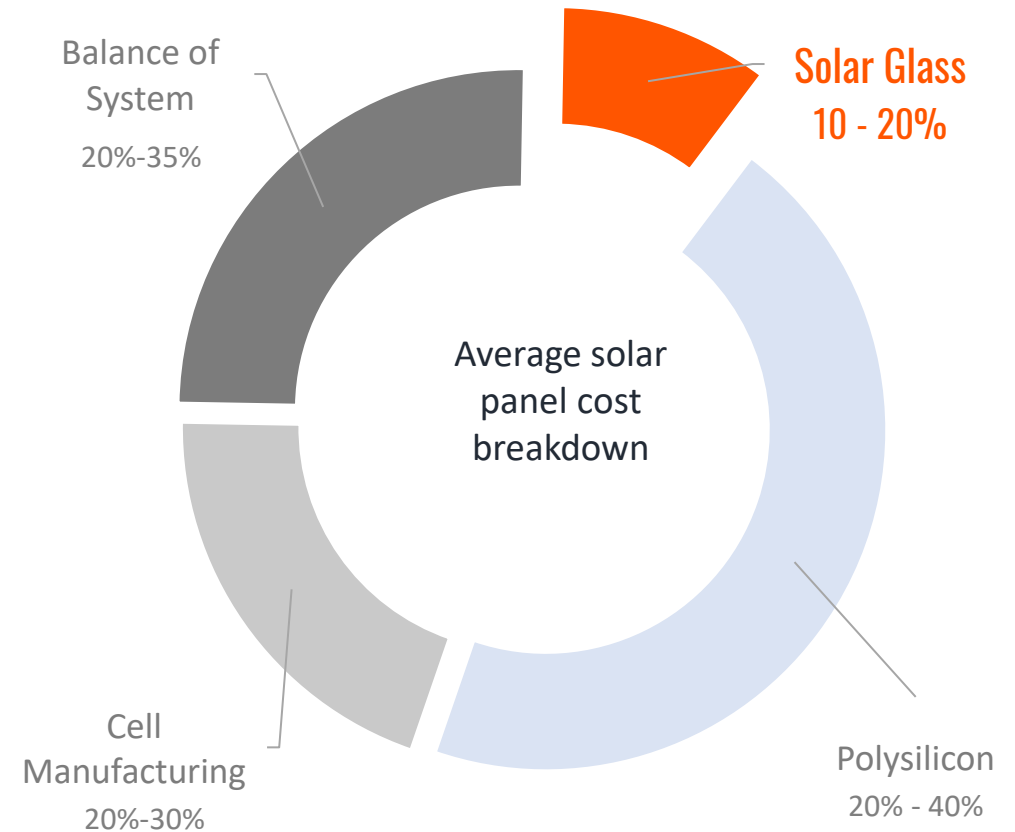
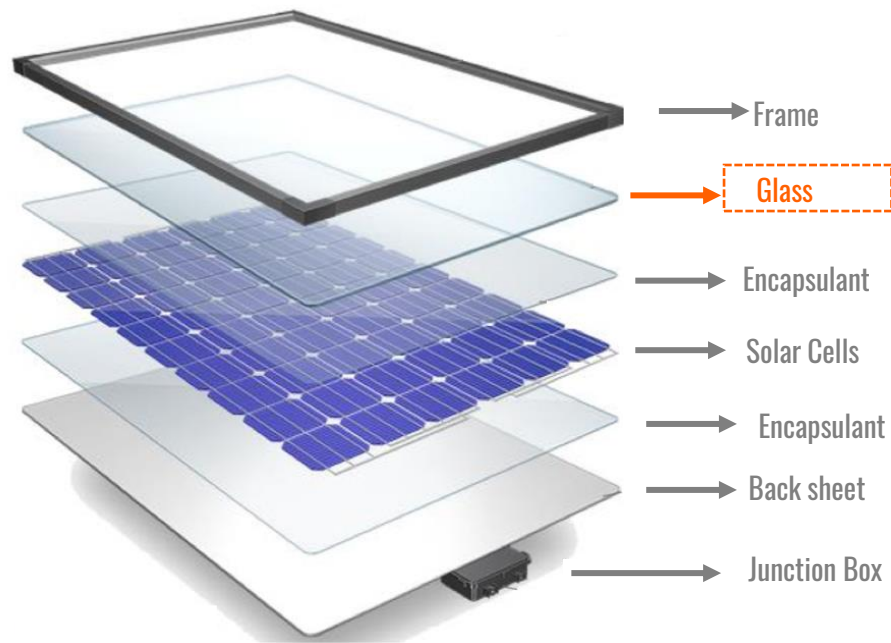
** 10% of the low interest loan principal amount from Province of Manitoba is forgivable if certain performance conditions are met.



Solar Glass is a Critical Component of Solar Panels

Patterned solar glass:

- Maximizes light transmittance
- Protects solar panel from elements
- Carries limited technology risk or obsolescence

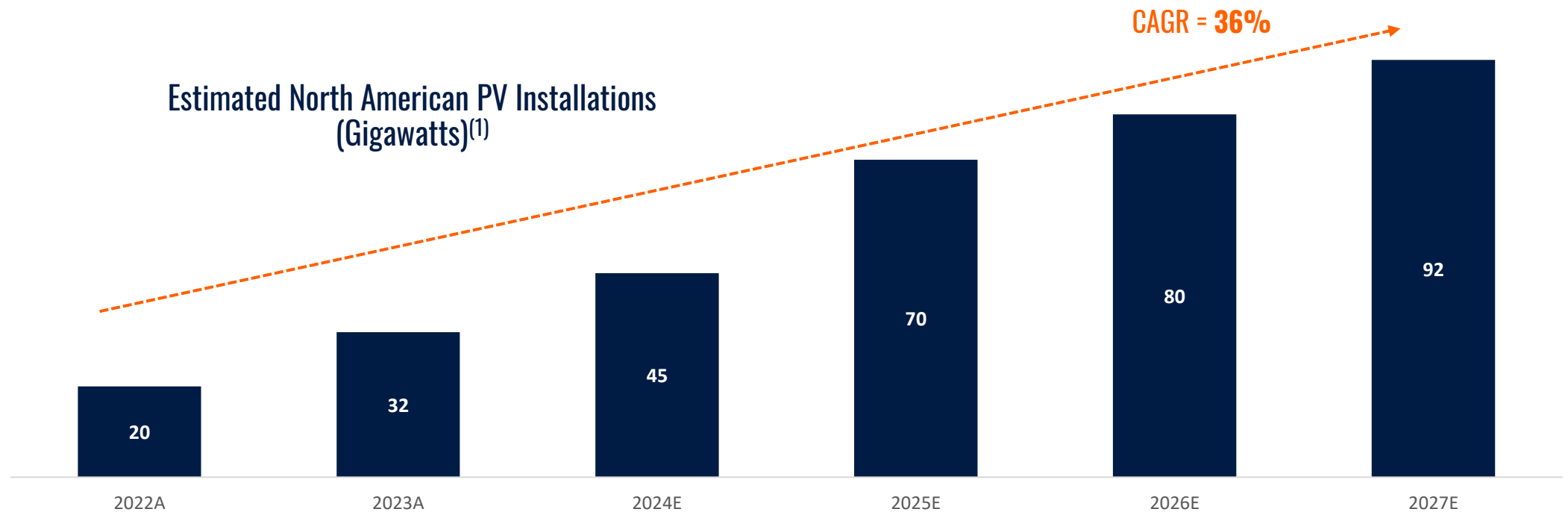




Significant North American Market Growth

Annual solar panel **installations** are expected to grow **36%** annually:

- Decarbonization target for the electricity grid
- Corporate sustainability commitments
- State level policies for net-metering
- Solar energy is cost competitive with traditional sources of energy





Current Dependence on Asia-Pacific Suppliers

Domestic solar panel manufacturers are aggressively seeking a local supply of glass and CPS is the only option

Asia-Pacific Supply Issues:

- Unpredictable costs
- Volatile tariff environment
- Insecure logistics
- High carbon intensity



Legend

-  North American Solar Panel Manufacturing Customers



Reducing Dependence on Asia-Pacific Suppliers

The U.S. Inflation Reduction Act provides significant measures to support domestic solar manufacturing capacity build-out in the U.S.

- ✓ **\$800 billion** in spending to support decarbonization goals
- ✓ Access to investment and production **tax credits** (ITC and PTC) totaling **\$241 billion** for solar manufacturing facilities and solar electricity generation projects
- ✓ ITC provides a tax incentive totaling nearly 50% of the manufacturing cost across the entire solar value chain

The Canadian federal government implemented investment tax credits for clean energy in 2024

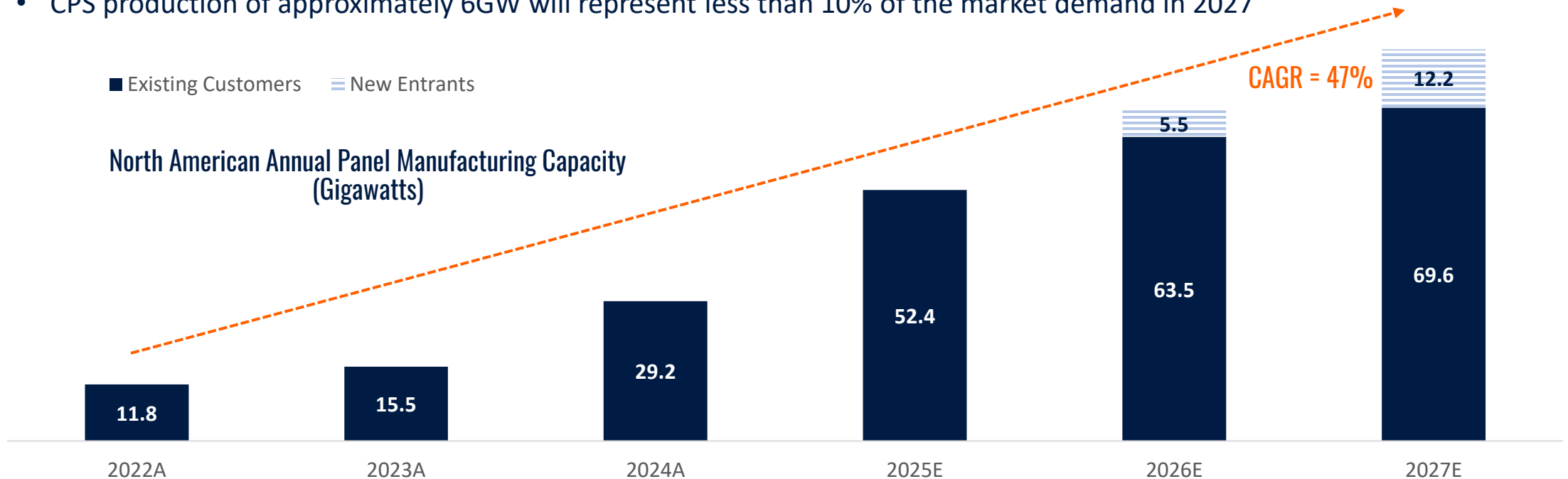
- ✓ **\$75 billion** in spending to support decarbonization goals
- ✓ Refundable 30% ITC for clean energy manufacturing

A Resurgence of North American Solar Energy Manufacturing Capacity is Underway



Fast Growing Domestic Market

- Several global module manufacturers announced billions of dollars in investments for new facilities in the US that are now under construction
- North American panel manufacturing capacity (and glass demand) is expected to increase nearly 7x from 12 GW per year in 2022 to 82 GW in 2027
- CPS production of approximately 6GW will represent less than 10% of the market demand in 2027



✓ [Hanwha Solutions \(Qcells\)](#) recently announced the largest investment in U.S. solar history (US\$2.5B) to build out a sustainable North American solar supply-chain to support growth.

✓ [Heliene Inc.](#) recently announced completion of a new facility and further expansion plans to become the second largest campus in the U.S, with the potential to start cell manufacturing in the near future.

✓ [Meyer Burger Technology AG](#) announced plans for a 1.5GW facility in Arizona to support U.S. clean energy transition and [announced 5GW in offtakes](#) for its panels from this facility.



Strategically Located and Vertically Integrated

Integration of sand resource with value-added manufacturing offers significant benefits



Sand Processing Facility

- ✓ Rare low-iron silica resource
- ✓ Abundant supply of 40+ years
- ✓ Cost certainty of key raw material
- ✓ Minimal overburden
- ✓ Minimal processing required




Solar Glass Manufacturing Facility

- ✓ Close to sand resource
- ✓ Low-cost hydro-electric power
- ✓ Designed with sustainability in mind
- ✓ Strong labour pool
- ✓ Efficient transportation hub
- ✓ Proximity to large solar panel manufacturers



Sand Processing Facility

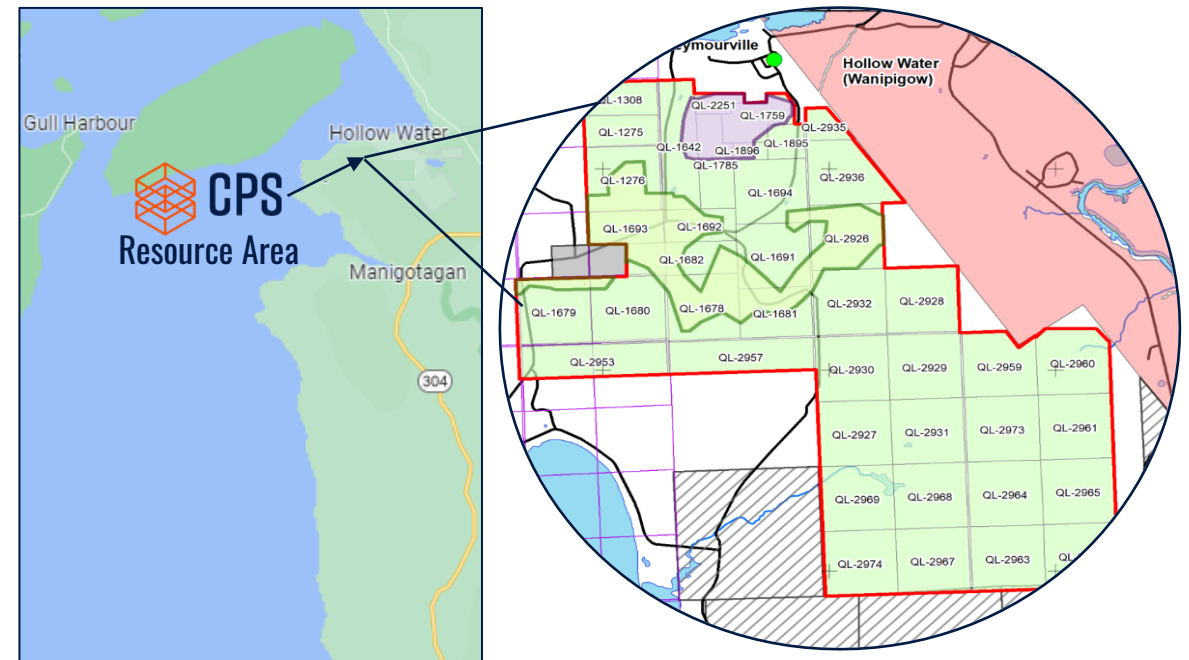
- CPS' rare, low-iron silica sand deposit is located only 160 km north of the planned glass manufacturing facility and is ideally suited for solar glass
- Limited processing is required for this ultra-pure sand: only sizing, scrubbing and magnetic iron removal is required
- CPS currently has 40 years of silica sand resources available for Phase 1 in the Main Glass Sand Resource Area
- The Future Target Exploration Area offers additional supply with approximately 20 million tonnes identified

Sand Quality Overview		
Technical Characteristics	 CPS Solar Spec Sand	Typical Glass Sand (North America)
SiO ₂ (purity)	99.6%+	99.0%+
Fe ₂ O ₃ (iron)	0.0092% (92ppm)	>0.018% of 180ppm
Photomicrograph		

Sand Processing Overview



Sand Extraction Map



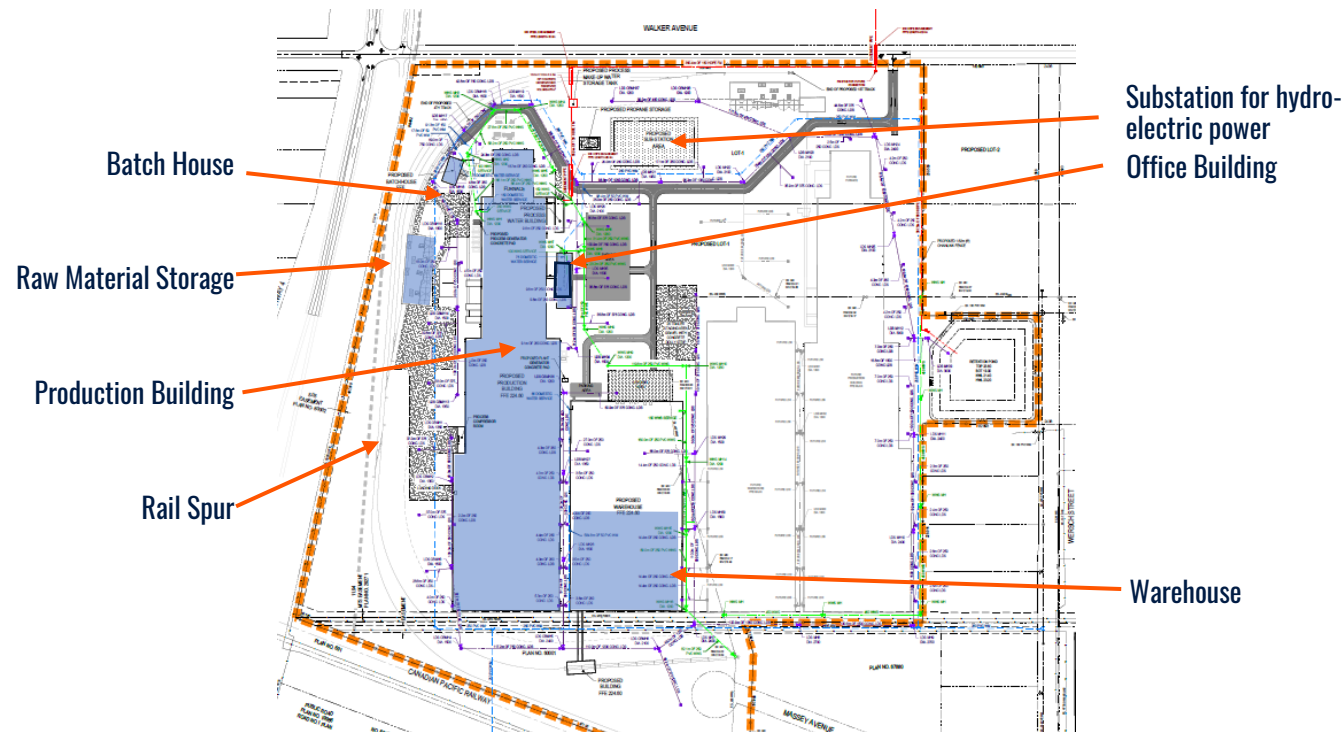


Glass Manufacturing Facility

CPS has secured 121 acres of heavy industrial land in the City of Selkirk, ideally suited for manufacturing:

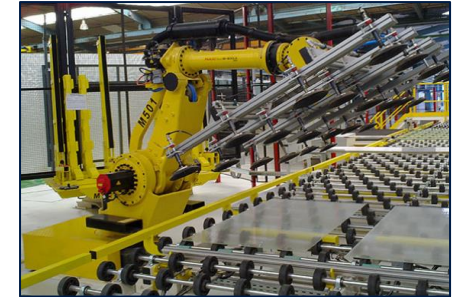
- Proximity to Manitoba Hydro 115kV power line, enabling access to renewable hydro-electric energy
- Pipeline access to wastewater plant, enabling use of high-quality recycled water
- Access to Class 1 rail line located on the south boundary

Heavy Industrial Zoned 121-acre Site



Solar Glass Manufacturing Overview

- 800 tpd furnace with 4 production spurs
- Automated rolled patterned production
- 12 production lines for front and back solar glass
- Anti-reflective coaters and tempering ovens





Project Execution

EPC consortium of two capable firms operating under a Joint Venture, delivering on a lump sum contracting model

- Canada's largest general contractor with operations in the civil infrastructure, heavy industrial, and buildings markets with an annual construction volume of over \$8B
- Serving as Prime Contractor on-site managing site safety and Balance of Plant scope including buildings, infrastructure and site development



- Global glass manufacturing specialists with over 2,100 projects completed in the company's 75-year history
- Responsible for the overall glass manufacturing and sand treatment process, interface between balance of plant and manufacturing process

Solar Glass Manufacturing Facility Subcontractors

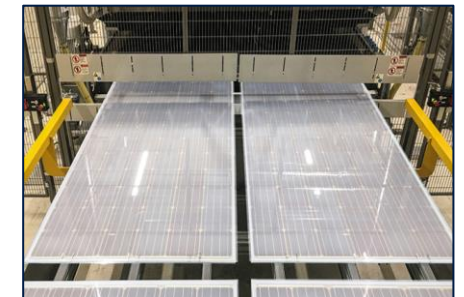
- ZIPPE** GERMANY Raw materials batch plant equipment
- fives stein** Furnace, forehearth, rolling equipment & lehrs
- BOTTERO** Glass processing and fabrication
- DMS** a SerVcoCanada company Steel, mechanical & electrical installations
- THORCAN** Furnace refractory installations

Sand Extraction Facility Subcontractors

- ELRUS** AGGREGATE SYSTEMS Sand processing equipment and conveyors
- McLanahan**
- DMS** a SerVcoCanada company Steel, mechanical & electrical installations

EPC Agreement

- Fixed price, turn-key execution for both facilities
- Operational and quality performance assurances
- Schedule incentives for early completion
- Incentives for identifying cost reduction opportunities

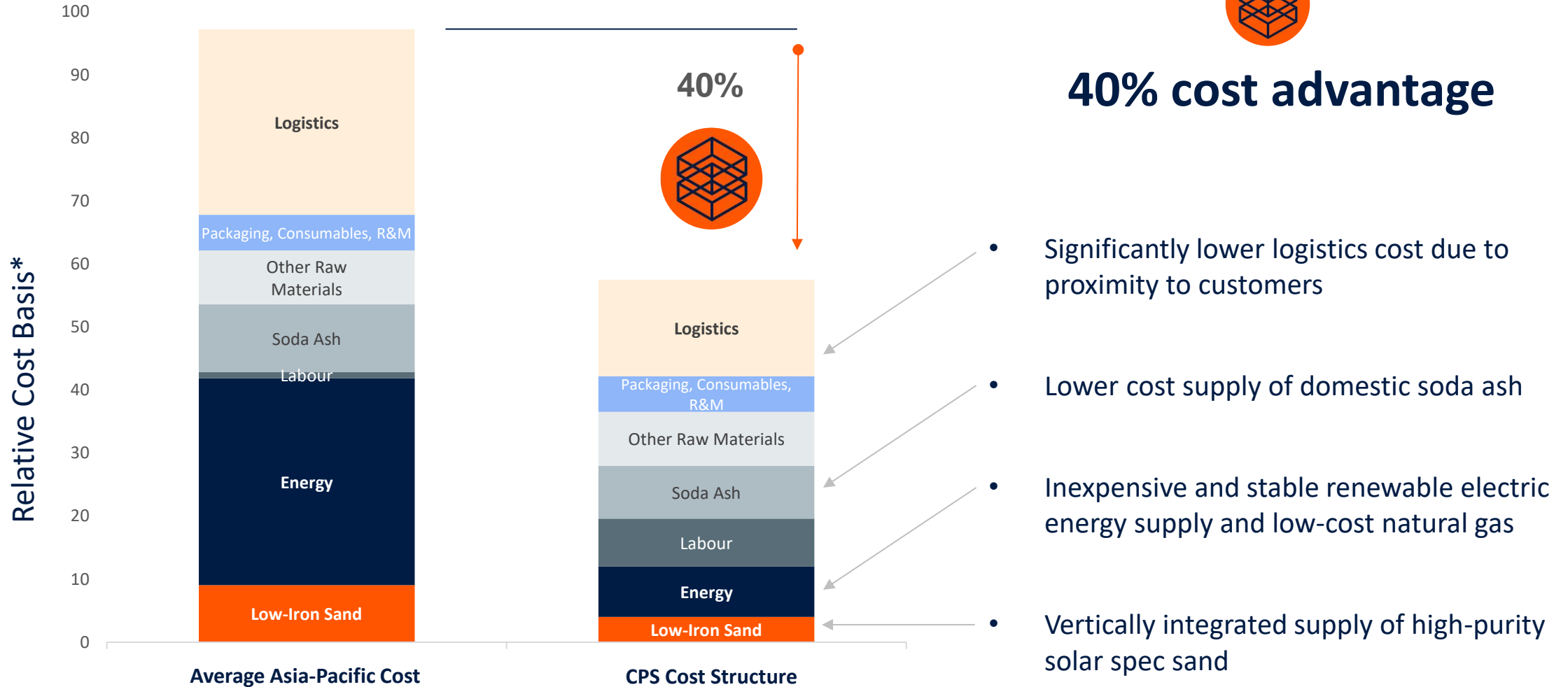




Long Term Cost Advantage



40% cost advantage



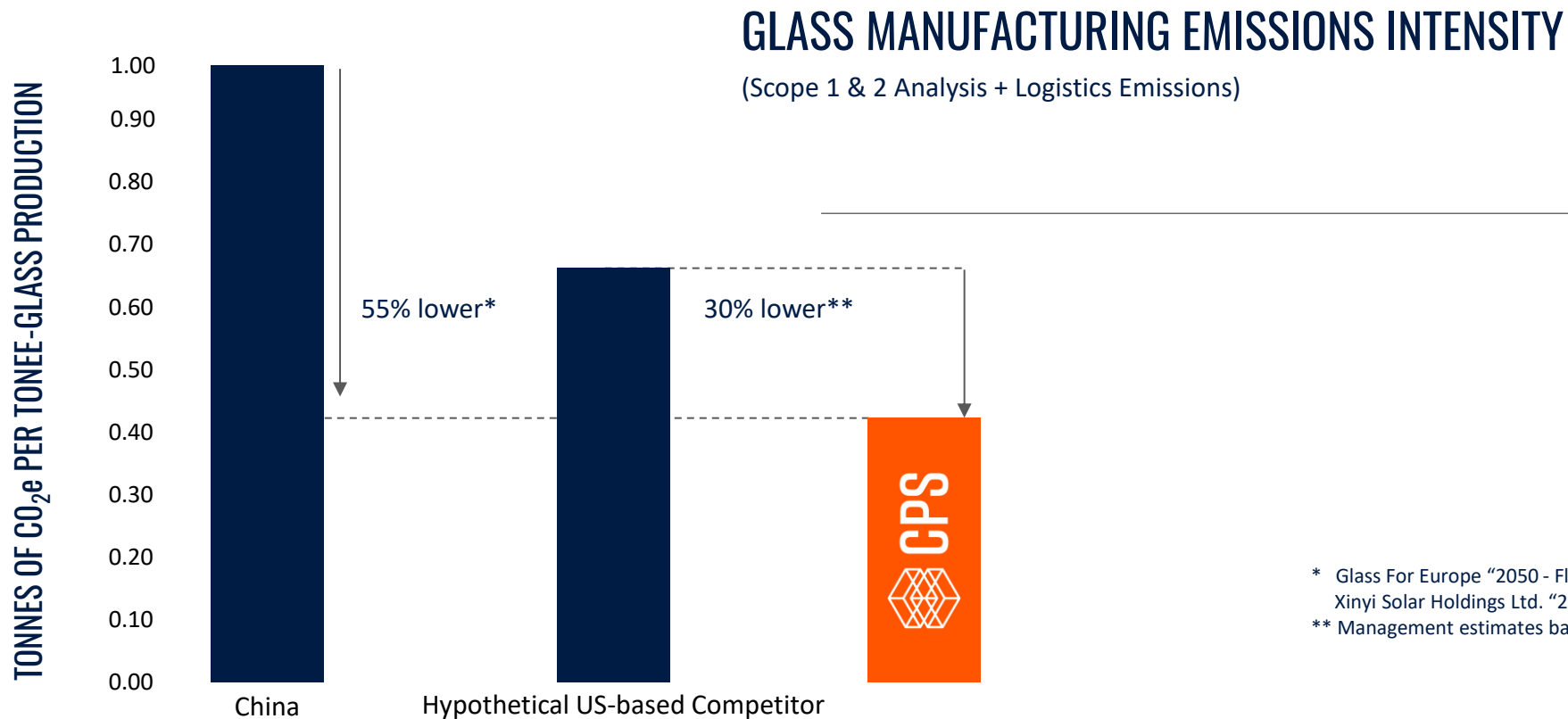
* Cost comparison is based on commodity futures for LNG and current ocean freight cost from Asia-Pacific



Low-Carbon Manufacturing

CPS will set a new standard for low-carbon manufacturing:

- Hydro-electric power
- Integration and proximity of solar spec sand resource
- Proximity to customers



* Glass For Europe "2050 - Flat Glass in Climate-Neutral Europe" 2020; Xinyi Solar Holdings Ltd. "2020 ESG Report"

** Management estimates based on carbon-intensity of grid in U.S.



Attractive Economics

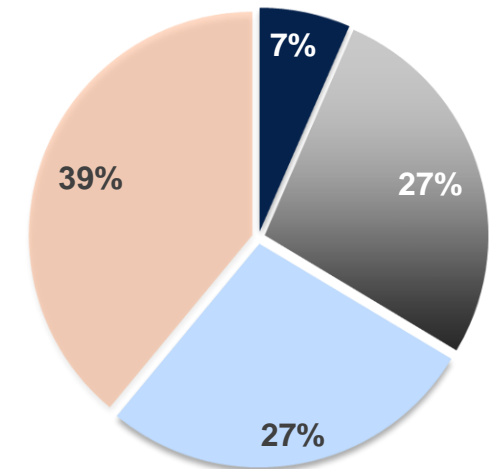
- Expected annual revenue of **\$300 to \$330 million**
 - Strong revenue visibility through binding commercial offtake agreements
- Expected annual EBITDA of **\$170 to \$190 million**
 - Cost advantages result in EBITDA margins of approximately **60%**
- Unlevered before-tax IRR of greater than **18%**
 - Subsequent phases offer additional upside through leveraging investment in common infrastructure



Corporate Overview

Capitalization

		Current
Share price (September 10, 2024)	(\$/share)	\$0.28
Common shares outstanding	(MM)	83.3
Market capitalization (basic)	(\$MM)	\$23.3
Net cash outstanding		
Cash and equivalents (Q3 2024 FS)	(\$MM)	\$1.3
Less: 12.0% convertible debentures due February 26, 2025	(\$MM)	-\$3.0
Net cash	(\$MM)	-\$1.7
Enterprise value	(\$MM)	\$21.6



- Management & Directors
- Paramount Resources & Strategic Investors
- Institutional Investors
- Other

Management Team

- Glenn Leroux, P.Eng**
President & CEO, Director
- Isha Kular, CPA, CA, MPAcc**
Chief Financial Officer
- Dana Partridge, BSc., JD**
VP, Glass Operations
- Anshul Vishal, P. Eng, MBA**
Vice President, Corporate Development
- Alasdair Knox, P. Eng, PMP, MBA**
Vice President, Project Engineering

Board of Directors

- Lowell Jackson, P. Eng | Chairman**
Previously CEO and President of WestFire Energy Ltd. and Real Resources Inc.
- Theresa Jester**
Previous executive roles at Solar World, Solaria and Hudson Energy Partners
- Rod Sousa, B. Comm., CFA**
Executive Vice-President, Corporate Development Planning at Paramount Resources Ltd.
- Todd Garman, B. Comm., MBA**
President at Iron Horse Energy Services
- John Assman**
President & CEO of Landtran Systems Inc.



Disclaimer

General

This corporate presentation dated July 2022 (the "**Presentation**") has been prepared by Canadian Premium Sand Inc. ("**CPS**" or the "**Company**"), and is based on public information of CPS. This Presentation is for information purposes only and is being made available by CPS to provide information on CPS and its business. This Presentation does not constitute an offer to sell to any person, or an offer to the public of, or the solicitation of an offer to subscribe or purchase, any securities of CPS, nor shall this Presentation or any part of it, or the fact of its delivery or ~~fdgdfgfdgfdg~~, form the basis of, or be relied upon in connection with, or act as an inducement to enter into any contract or commitment whatsoever with respect to any securities. Any unauthorized use of this Presentation is strictly prohibited. The information contained herein, any presentation made to the recipient verbally and any other information provided to the recipient (in writing or otherwise) in connection with CPS and its business (collectively, the "**Presentation Materials**") is subject to updating, completion, revision, verification and amendment at any time without notice which may result in material changes. The information contained in the Presentation Materials is provided as at July 27, 2022 unless otherwise stated. The Presentation Materials are not intended to provide financial, tax, legal, investment, or accounting advice and do not purport to contain all the information relating to CPS or its business. Any potential investor should perform and rely on its own investigation and analysis of CPS and its business and is advised to seek its own professional advice in respect of any investment. In particular, any estimates, forecasts, projections or opinions contained herein necessarily involve significant elements of subjective judgment, analysis and assumptions and risks and each recipient should satisfy itself in relation to such matters. Neither CPS nor Peters & Co. Limited or Fort Capital Partners (together, the "**Agents**") make any representation or warranty, express or implied, and assumes no responsibility for the accuracy or completeness of the information contained in the Presentation Materials or any other oral or written communication transmitted to the recipient, and nothing contained in the Presentation Materials is, or shall be relied upon as, a promise or representation by CPS or the Agents as to the past or future performance of CPS. CPS does not undertake to provide any additional information to the recipient. Certain information contained herein includes market and industry data that has been obtained from or is based upon estimates derived from third party sources, including industry publications, reports and websites. There is no assurance or guarantee as to the accuracy or completeness of included third party data. Although the data is believed to be reasonably reliable, neither CPS nor the Agents have independently verified the accuracy, currency or completeness of any of the information from third party sources referred to in this Presentation or ascertained from the underlying economic assumptions relied upon by such sources. By accessing this Presentation, recipients will be deemed to acknowledge and agree to the matters set forth above and below

Technical Disclosure

Technical information contained in this Presentation that relate to the silica sand resource has been extracted or summarized based on the information contained in the independent Technical Report and Mineral Resource update of Wanipigow Sand Quarry dated October 14, 2021, reviewed and approved by Roy Eccles, P. Geol. of APEX Geoscience Ltd., who is independent of the Company and a "qualified person" under National Instrument 43-101 - *Standards of Disclosure for Mineral Projects*. Readers are cautioned not to solely rely on the summary of this information but should read the Technical Report in its entirety which is available for review on the Company's profile on SEDAR at www.sedar.com.

Forward-Looking Information

Certain statements contained in this Presentation constitute forward-looking statements relating to, without limitation, expectations, intentions, plans and beliefs, including information as to the future events, results of operations and the Company's future performance (both operational and financial) and business prospects. In certain cases, forward-looking statements can be identified by the use of words such as "expects", "estimates", "forecasts", "intends", "anticipates", "believes", "plans", "seeks", "projects" or variations of such words and phrases, or state that certain actions, events or results "may" or "will" be taken, occur or be achieved. Such forward-looking statements reflect the Company's beliefs, estimates and opinions regarding its future growth, results of operations, future performance (both operational and financial), and business prospects and opportunities at the time such statements are made, and the Company undertakes no obligation to update forward-looking statements if these beliefs, estimates and opinions or circumstances should change. Forward-looking statements are necessarily based upon a number of estimates and assumptions made by the Company that are inherently subject to significant business, economic, competitive, political and social uncertainties and contingencies. Forward-looking statements are not guarantees of future performance. In particular, this Presentation contains forward-looking statements pertaining, but not limited, to: the market outlook and future pricing of solar glass; the plans to advance the first stage of the project; the capital cost estimate for the project; the ability to add future production capacity to accommodate the anticipated growth in solar glass demand; estimates of annual EBITDA and pro forma net debt; the expectation that CPS will be the lowest cost provider of patterned solar glass; NPV and IRR estimates; the potential to construct up to three additional equally sized manufacturing facilities at the same site and the benefits of such additional facilities; the timing for the construction of the initial manufacturing facility; the expectations that CPS will receive a Class 2 capital cost estimate and the timing for such estimate; the expectation that the project will provide for strong economic returns for our current and future shareholders; the other development initiatives the Company plans to advance; the size of the Offering; use of net proceeds under the Offering; the expected participation of insiders in the Offering; the anticipated closing and closing time of the Offering; the receipt of TSX Venture Exchange approval for the Offering; key milestones relating to the use of net proceeds under the Offering; the timing for the commencement of construction for the facility; future development and construction plans; future development plans; industry activity levels; industry conditions pertaining to the solar glass manufacturing industry; the ability of and manner by which the Company expects to meet its capital needs; and the Company's objectives, strategies and competitive strengths. By their nature, forward-looking statements involve numerous current assumptions, known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to differ materially from those anticipated by the Company and described in the forward-looking statements.

A number of factors, risks and uncertainties could cause results to differ materially from those anticipated and described herein including, among others: the effects of competition and pricing pressures; effects of fluctuations in the price of glass products and raw materials input costs; risks related to indebtedness and liquidity, including the Company's capital requirements; supply chain risks; inflationary risks; risks related to interest rate fluctuations and foreign exchange rate fluctuations; changes in general economic, financial, market and business conditions in the markets in which the Company operates; the Company's ability to obtain, maintain and renew required permits, licenses and approvals from regulatory authorities; the stringent requirements of and potential changes to applicable legislation, regulations and standards; the ability of the Company to comply with unexpected costs of government regulations; liabilities resulting from the Company's operations; the results of litigation or regulatory proceedings that may be brought against the Company; uninsured and underinsured losses; risks related to the transportation of the Company's products, including potential rail line interruptions or a reduction in rail car availability; the geographic and customer concentration of the Company; the ability of the Company to retain and attract qualified management and staff in the markets in which the Company operates; labor disputes and work stoppages and risks related to employee health and safety; general risks associated with the glass manufacturing and sand quarry industries, loss of markets, consumer and business spending and borrowing trends; limited, unfavorable, or a lack of access to capital markets; uncertainties inherent in estimating quantities of products; processing problems; the use and suitability of the Company's accounting estimates and judgments; and the other risk factors outlined in CPS's most recent Management's Discussion and Analysis which is available on SEDAR at www.sedar.com. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in its forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will materialize or prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. The forward-looking statements contained in this Presentation are expressly qualified by this cautionary statement. Readers should not place undue reliance on forward-looking statements. These statements speak only as of the date of this Presentation. Except as may be required by law, the Company expressly disclaims any intention or obligation to revise or update any forward-looking statements or information whether as a result of new information, future events or otherwise. Any financial outlook and future-oriented financial information contained in this Presentation regarding prospective financial performance, financial position, cash flows, EBITDA or net debt projections are based on assumptions about future events, including economic conditions and proposed courses of action based on management's assessment of the relevant information that is currently available. Projected operational information contains forward-looking information and is based on a number of material assumptions and factors, as are set out above. These projections may also be considered to contain future oriented financial information or a financial outlook. The actual results of the Company's operations for any period will likely vary from the amounts set forth in these projections and such variations may be material. Actual results will vary from projected results. Readers are cautioned that any such financial outlook and future-oriented financial information contained herein should not be used for purposes other than those for which it is disclosed herein. The forward-looking information and statements contained in this document speak only as of the date hereof and the Company does not assume any obligation to publicly update or revise them to reflect new events or circumstances, except as may be required pursuant to applicable laws



Disclaimer (Cont'd)

Market, Independent Third Party and Industry Data

Certain market, independent third-party and industry data contained in this Presentation is based upon information from government or other independent industry publications and reports or based on estimates derived from such publications and reports. Government and industry publications and reports generally indicate that they have obtained their information from sources believed to be reliable, but the Company has not conducted its own independent verification of such information. This Presentation also includes certain data derived from public filings made by independent third parties. While the Company believes this data to be reliable, market and industry data is subject to variations and cannot be verified with complete certainty due to limits on the availability and reliability of raw data, the voluntary nature of the data gathering process and other limitations and uncertainties inherent in any statistical survey. The Company has not independently verified any of the data from independent third-party sources referred to in this Presentation or ascertained the underlying assumptions relied upon by such sources.

Non-GAAP Financial Measures

In this Presentation, CPS has used the following terms (each a "**Non-GAAP Financial Measure**") which is not defined by International Financial Reporting Standards ("**IFRS**") but is used by management to evaluate the performance of CPS and its business: "EBITDA" and "net debt". EBITDA is defined as earnings before interest, taxes, depreciation and amortization. Management uses the term "net debt", as a key measure for evaluating its capital structure and to provide shareholders and potential investors with a measurement of the Company's total indebtedness. These measures may also be used by investors, financial institutions and others to assess CPS's performance and ability to service debt. Non-GAAP Financial Measures do not have standardized meanings prescribed by IFRS and are therefore unlikely to be comparable to similar measures presented by other companies. Securities regulations require that Non-GAAP Financial Measures are clearly defined, qualified and reconciled to their most comparable IFRS financial measures. Except as otherwise indicated, Non-GAAP Financial Measures are calculated and disclosed on a consistent basis from period to period. Specific items may only be relevant in certain periods. The intent of Non-GAAP Financial Measures is to provide additional useful information to investors and analysts, and the measures do not have any standardized meaning under IFRS. The measures should not, therefore, be considered in isolation or used in substitute for measures of performance prepared in accordance with IFRS. Other issuers may calculate Non-GAAP Financial Measures differently. Investors should be cautioned that EBITDA and net debt should not be construed as an alternative to net earnings, cash flow from operating activities or other measures of financial results determined in accordance with GAAP as an indicator of CPS's performance.

Currency

All references to "\$" in this Presentation are to Canadian dollars, unless otherwise noted.

Internal Financial Modeling

Certain information contained in this Presentation including the information presented on slides 4 and 13 is derived from internal financial modeling based on: capital and operating cost details from the FEED study; current solar glass price data from Singapore Solar Exchange and PV InfoLink; and logistics quotes for delivery costs of solar glass to North American locations. Implicit in forward-looking information in respect of the EBITDA projections contained in this Presentation are certain current assumptions, including, among others, that the Company will continue to execute on its strategy of developing manufacturing capacity for solar glass, attracting customers and end-users, realize operational efficiencies from its integrated sand quarry, and extract procurement and cost synergies on time and on budget. Additional assumptions include no changes to the current economic environment, no material changes in interest rates and foreign exchange rates, procurement, development or supply costs, access to equity and debt capital and sufficient cash flow for ongoing operations. These assumptions are based on the fact that funding for the construction of the facility will be obtained, the project will receive final investment decision approval from the CPS board and the ultimate construction of the facility will proceed as scheduled and on budget, markets for solar glass and access to end markets. See also "Forward Looking Information" above.