UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 OF THE SECURITIES EXCHANGE ACT OF 1934

For the month of March 2009

Commission File Number: 001-33107

CANADIAN SOLAR INC.

No. 199 Lushan Road Suzhou New District Suzhou, Jiangsu 215129 People's Republic of China (Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F 🗹 Form 40-F o

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): o

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): o

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes o 🛛 No 🗹

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b):

82-<u>N/A</u>

CANADIAN SOLAR INC.

Form 6-K

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<u>Signature</u> <u>Exhibit 99.1 - Press Release</u> Page

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CANADIAN SOLAR INC.

By: /s/ Shawn (Xiaohua) Qu

Name: Shawn (Xiaohua) Qu Title: Chairman, President and Chief Executive Officer

Date: March 18, 2009

Canadian Solar Inc.

Canadian Solar Reports Fourth Quarter and Year End 2008 Results

2008 Results

- Q4 net revenues of \$73.0 million, compared to Q4 2007 net revenues of \$127.5 million and Q3 2008 net revenues of \$252.4 million.
- Q4 net loss per diluted share of \$1.42 compared to Q3 net income per diluted share of \$0.31.
- Full year 2008 net revenues of \$709.2 million, a 134% increase over full year 2007 net revenues of \$302.8 million.
- Q4 shipments of 19.6 MW, bringing full year 2008 shipments to 167.5 MW, a 100% increase over full year 2007 shipments of 83.4 MW.
- December 31, 2008 cash position of \$136.2 million, accounts receivables of \$50.6 million and debt to equity ratio of 47%.

2009 Outlook and Developments

- Full year 2009 net revenue guidance of \$600 to \$800 million on shipments of 300 to 350 MW.
- Approximately 262 MW of projected 2009 module sales (74-87% of guidance) secured by contracts. Approximately 120 MW of the current contracts are for e-Modules.

Toronto, Canada, March 17, 2009 — Canadian Solar Inc. (the "Company," "Canadian Solar" or "we") (NASDAQ: CSIQ) today reported its unaudited US GAAP financial information for the fourth quarter and the year ended December 31, 2008.

Net revenues for the quarter were \$73.0 million (including \$5.4 million of silicon material sales), compared to net revenues of \$127.5 million for the fourth quarter of 2007 (including \$2.4 million of silicon materials sales) and \$252.4 million for the third quarter of 2008 (including \$nil of silicon materials sales). Net loss for the quarter was \$50.6 million, or \$1.42 per diluted share, compared to a net income of \$6.0 million, or \$0.21 per diluted share, for the fourth quarter of 2007 and net income of \$11.1 million, or \$0.31 per diluted share, for the third quarter of 2008. Excluding share-based compensation expenses of \$1.0 million, non-GAAP net loss for the quarter would have been \$49.6 million, or \$1.39 per diluted share.

The net loss in the fourth quarter included a \$23.3 million write-down for inventory against the net realizable value of inventories as a result of the rapid decrease in the market price and value of feedstock, work-in-progress and finished solar modules. The net loss also included a \$12.8 million provision for doubtful accounts. The inventory write-down appears on the income statement as a component of cost of goods sold, while the provision for doubtful accounts appears in the income statement as a component of the SG & A expenses. The Company has \$136.2M cash at the end of the quarter. Accounts receivables at the end of the quarter were \$50.6 million compared with \$153.1 million at the end of Q3. Over the same period the Company paid down approximately \$78 million in short term and related party debt.

Net revenues for 2008 were \$709.2 million, compared to \$302.8 million for 2007, an increase of 134% per year. Net loss for 2008 was \$10.0 million, or \$0.32 per diluted share, compared to net loss of \$0.2 million, or \$0.01 per diluted share, for 2007. Excluding share-based compensation expenses of \$9.1 million and debt conversion expenses of \$10.2 million, non-GAAP net income for 2008 would have been \$9.3 million, or \$0.29 per diluted share.

Our effective management helped us to mitigate the impact of foreign exchange fluctuation in 2008. The total foreign exchange loss net of hedging gain on financial instruments was \$5.6 million for the full year 2008.

Dr. Shawn Qu, Chairman and CEO of Canadian Solar, commented: "The end of 2008 was a challenging time for Canadian Solar and for the industry. In Q4, difficult credit conditions for our customers, market-wide module and raw materials inventory price declines and winter weather in Germany directly affected our revenue growth and profitability. Despite these macroeconomic headwinds, we continued to post solid sales to paying customers and to maintain financial discipline. We ended the year with \$709.2 million in annual net revenues, a 134% increase over full year 2007, and approximately \$136 million in cash, an impressive accomplishment in such tough times. Some of these challenges will persist well into 2009. Nevertheless, Canadian Solar is well positioned to ride out the market turbulence and emerge as an even more successful player. Our strategy will continue to include protecting our balance sheet, maintaining and improving relationships with our high-quality customers who are larger, long-term solar players and to improving our already very competitive cost structure. We expect to achieve wafer to module processing costs of \$0.60 per watt and polysilicon to module processing costs of \$0.90 per watt by the end of Q2 2009. We believe our ongoing R&D will further improve our products and cost structure, and distinguish us from many of our competitors. "

Arthur Chien, CFO of Canadian Solar, noted: "We are encouraged by our ability to weather the current economic storm to date, especially as seen in our cash generation and healthy balance sheet. We exercised prudent financial management principles by writing down the value of inventory and making provisions for doubtful accounts. These balance sheet provisions did however significantly affect our quarterly and annual results. We expect to see improved gross margins in Q2 2009 and achieve our guidance margins in H2 once older inventory has been used and as we benefit from lower raw materials pricing. It should also be noted that subsequent to our Q4 pre-release approximately \$8 million of long-term debt was reclassified as short-term debt. We believe our strong cash position, low accounts receivables and our access to additional short and long term financing through the support of our local banks are sufficient for our working capital requirements, while retaining our ability to increase capital expenditures that will help to increase our margins and capacity over the long term."

	Q408		Q308		Q407		FY08		FY07	
Region	Revenue	%								
Europe	57.0	78.1%	222.4	88.1%	124.1	97.3%	635.3	89.6%	286.6	94.6%
Asia	9.6	13.1%	16.5	6.5%	2.9	2.3%	41.6	5.9%	13.6	4.5%
America	6.4	8.8%	13.5	5.4%	0.5	0.4%	32.3	4.5%	2.6	0.9%
Total Net										
Revenue	73.0	100%	252.4	100%	127.5	100%	709.2	100%	302.8	100%

Recent Developments

- Opened the cell research center, with cell efficiency targets of 18.5% for mono-crystalline cells, 16.5% for multi-crystalline cells and 15.5% for solar grade cells used in e-Modules by year-end 2009.
- Moved the principal place of business of our U.S. subsidiary to San Ramon, California in January 2009.
- Achieved 120-150 MW of ingot and wafer capacity and 270 MW of cell capacity in 2008.
- Renegotiated the prices and payment terms with certain wafer suppliers reflecting the change in the market conditions. Further discussions are currently ongoing with our strategic suppliers to adjust our long-term supply contracts.
- Customers installed and obtained financing for estimated 10-12 MW of e-Modules in 2008 with up to 120 MW of installations expected in 2009. Canadian Solar now has more than one year of field data from successful installations of this product and from test installations.

Outlook

Based on current customer orders, market forecasts and supply contracts, we are offering guidance on full year 2009 shipments of 300 to 350 MW, with net revenues of \$600 to \$800 million. Achieving our guidance assumes improved macroeconomic conditions in H2 2009. With our disciplined financial management, strong customer and supplier ties, and flexible vertical integration model, we believe that we are currently on track to achieve shipment and revenue guidance.

To protect cash flow from Euro sales against USD exchange rate fluctuation, for the first half of 2009 we transacted 128 million Euros in economic hedges with forward contracts and collars at pricing between 1.36 and 1.49 Euros per U.S. dollar, while for forecasting purposes we have assumed an exchange rate of 1.25 Euros per U.S. dollar for the first half of 2009.

Dr. Qu stated: "Canadian Solar has now achieved the scale and cost structure to be a long-term player in the solar industry. We currently have one of the most complete crystalline solar module product lines, consisting of high-efficiency mono- crystalline, multi- crystalline solar modules and e-Modules, the most cost-effective crystalline module product on the market. Our high-efficiency crystalline solar products compete favorably with our competitors while our e-Modules offer the quality and durability of crystalline products at prices approaching those of thin-film products. Looking ahead, we believe that we will return to our margin guidance in the second half of the year. This will be achieved by improvements in our cost structure, pricing adjustments in supply agreements and aggressive marketing and sales efforts.

We have already received record level inquiries from our customers with approximately 262 MW contracts signed and an additional 190 MW in the near-term contract pipeline.

We intend to continue our long-term supply chain strategy of combining internal solar wafer and cell production with direct purchasing from a select number of long-term strategic wafer and cell suppliers. The Company continues to develop and deploy new technologies; including the use of solar grade silicon based solar module products and improved PV cell structures including selective emitter, N-type and back contact cells."

Investor Conference Call / Webcast Details

A conference call has been scheduled for 8:00 p.m. on Tuesday, March 17, 2009 (in Jiangsu). This will be 8:00 a.m. on Tuesday, March 17, 2009 in New York. During the call, time will be set aside for analysts and interested investors to ask questions of senior executive officers of the Company.

The call may be accessed by dialing: +1-800-638-5495 (domestic) or +1-617-614-3946 (international). The passcode to access the call is: 67938727. A replay of the call will be available starting one hour after the call and continuing until 11:00 p.m. on Tuesday, March 24, 2009 (in Jiangsu) or 11:00 a.m. on Tuesday, March 24, 2009 (in New York) at http://www.csisolar.com and by telephone at +1-888-286-8010 (domestic) or +1-617-801-6888 (international). The passcode to access the replay is: 20328110.

About Canadian Solar Inc. (NASDAQ: CSIQ)

Founded in 2001, Canadian Solar Inc. (Canadian Solar) is a vertically integrated manufacturer of solar cell, solar module and custom-designed solar application products serving customers worldwide. Canadian Solar is incorporated in Canada and conducts its businesses worldwide and manufacturing operations in China. Backed by years of experience and knowledge in the solar power market and the silicon industry, Canadian Solar has become a major global provider of solar power products for a wide range of applications. For more information, please visit http://www.csisolar.com.

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Safe Harbor/Forward-Looking Statements

Certain statements in this press release including statements regarding expected future financial and industry growth are forward-looking statements that involve a number of risks and uncertainties that could cause actual results to differ materially. These statements are made under the "Safe Harbor" provisions of the U.S. Private Securities Litigation Reform Act of 1995. In some cases, you can identify forward-looking statements by such terms as "believes," "expects," "anticipates," "intends," "estimates," the negative of these terms, or other comparable terminology. Factors that could cause actual results to differ include general business and economic conditions and the state of the solar industry; governmental support for the deployment of solar power; future shortage or availability of the supply of high-purity silicon; demand for end-use products by consumers and inventory levels of such products in the supply chain; changes in demand from significant customers, including customers of our silicon materials sales; changes in demand from major markets such as Germany; changes in new product introduction; continued success in technological innovations and delivery of products with the features customers demand; shortage in supply of materials or capacity requirements; availability of financing; exchange rate fluctuations; litigation and other risks as described in the Company's SEC filings, including its annual report on Form 20-F originally filed on May 29, 2007. Although the Company believes that the expectations reflected in the forward-looking statements. All information provided in this press release is as of today's date, unless otherwise stated, and Canadian Solar undertakes no duty to update such information, except as required under applicable law.

Canadian Solar Inc. Reconciliation of US GAAP Gross Profit (Loss), Operating Income (Loss) and Net Income (Loss) to Non-US GAAP Gross Profit (Loss), Operating Income (Loss) and Net Income (Loss) (Unaudited) Use of Non-US GAAP Financial Information

To supplement its unaudited condensed consolidated financial statements presented in accordance with US GAAP, Canadian Solar uses the following measures as defined as non-US GAAP financial measures by the SEC: adjusted gross profit, adjusted operating income (loss) and adjusted net income (loss), each excluding share-based compensation and other one-time non-cash charges, expenses or gains, which we refer to as special items. Canadian Solar believes that non-US GAAP adjusted gross profit (loss), adjusted operating income (loss) and adjusted net income (loss) measures indicate the Company's baseline performance before subtracting those charges. In addition, these non-US GAAP measures are among the primary indicators used by the management as a basis for its planning and forecasting of future periods. The presentation of these non-US GAAP measures is not intended to be considered in isolation or as a substitute for the financial information prepared and presented in accordance with US GAAP.

		2008 Q4 Operating		
	Gross loss	loss	Net loss	
US GAAP (Loss)/Profit	(25,220)	(45,916)	(50,620)	
Share-Based Compensation	85	1,029	1,029	
Total Special Items	85	1,029	1,029	
Non-US GAAP (Loss)/Profit	(25,135)	(44,887)	(49,591)	
Non-US GAAP Earnings/(Loss) Per Diluted Share			(\$1.39)	
Adjusted Gross (Loss)/Margin	-34.40%			

-61.5%

11.6%

Adjusted Operating (Loss)/Margin

Adjusted Operating (Loss)/Margin

		2008 Q3	
	Gross profit	Operating income	Net income
US GAAP (Loss)/Profit	39,106	25,754	11,070
Share-Based Compensation	86	3,538	3,538
Total Special Items	86	3,538	3,538
Non-US GAAP (Loss)/Profit	39,192	29,292	14,608
Non-US GAAP Earnings/(Loss) Per Diluted Share			\$ 0.41
Adjusted Gross (Loss)/Margin	15.5%		

Operating income	i	Net
		ncome
5,491		5,993
2,181		2,181
2,181		2,181
7,672		8,174
	\$	0.29
6.0%		
	7,672	7,672

	2008 1~12				2007 1~12		
	Gross profit	Operating income	Net income/ (loss)	Gross profit	Operating income/ (loss)		Net icome/ (loss)
US GAAP Profit/(Loss)	75,198	23,132	(10,009)	23,776	(1,957)		(210)
Share-Based Compensation	350	9,102	9,102	253	9,200		9,200
Debt Conversion Expenses	—	—	10,170	—	—		
Total Special Items	350	9,102	19,272	253	9,200		9,200
Non-US GAAP Profit	75,548	32,234	9,263	24,029	7,243		8,990
Non-US GAAP Earnings Per Diluted Share			\$ 0.29			\$	0.33
Adjusted Gross Margin	10.7%			7.9%			
Adjusted Operating Margin		4.5%			2.4%		

Canadian Solar Inc. Unaudited Condensed Consolidated Statements of Operations (In Thousands of U.S. Dollars, Except Share And Per Share Data And Unless Otherwise Stated)

	Q4 2008	Q3 2008	Q4 2007
Net Revenues	73,013	252,362	127,459
Cost Of Revenues	98,233	213,256	112,851
Gross (Loss)/Profit	(25,220)	39,106	14,608
Operating Expenses:			
Selling Expenses	1,768	3,482	2,970
General And Administrative Expenses	18,455	9,267	5,826
Research And Development Expenses	473	603	321
Total Operating Expenses	20,696	13,352	9,117
(Loss)/Income From Operations	(45,916)	25,754	5,491
Other Income/(Expenses):			
Interest Expenses	(2,479)	(3,379)	(1,423)
Interest Income	2,552	819	166
Tax Refund For Reinvestment	—	—	924
Debt Conversion Expenses	—	—	
Gain On Financial Instruments	7,031	7,424	—
Foreign Exchange (Loss)/Gain	(10,363)	(17,298)	727
(Loss)/Income Before Taxes	(49,175)	13,320	5,885
Income Taxes	(1,445)	(2,250)	108
Net (Loss)/Income	(50,620)	11,070	5,993
Basic (Loss)/Earnings Per Share	(\$1.42)	\$ 0.32	\$ 0.22
Basic Weighted Average Number Of Outstanding Shares	35,686,313	34,802,363	27,297,428
Diluted (Loss)/Earnings Per Share	(\$1.42)	\$ 0.31	\$ 0.21
Diluted Weighted Average Number Of Outstanding Shares	35,686,313	35,580,187	28,130,379

Canadian Solar Inc. Unaudited Condensed Consolidated Statements of Operations (In Thousands of U.S. Dollars, Except Share And Per Share Data And Unless Otherwise Stated)

	2008 1~12	2007 1~12
Net Revenues	709,196	302,798
Cost Of Revenues	633,998	279,022
Gross (Loss)/Profit	75,198	23,776
Operating Expenses:		
Selling Expenses	10,608	7,531
General And Administrative Expenses	39,633	17,204
Research And Development Expenses	1,825	998
Total Operating Expenses	52,066	25,733
(Loss)/Income From Operations	23,132	(1,957)
Other Income/(Expenses):		
Interest Expenses	(11,266)	(2,367)
Interest Income	3,531	562
Tax Refund For Reinvestment	—	924
Debt Conversion Expenses	(10,170)	
Gain On Financial Instruments	14,455	—
Foreign Exchange (Loss)/Gain	(20,087)	2,443
(Loss)/Income Before Taxes	(405)	(395)
Income Taxes	(9,604)	185
Net (Loss)/Income	(10,009)	(210)
Basic (Loss)/Earnings Per Share	(\$0.32)	(\$0.01)
Basic Weighted Average Number Of Outstanding Shares	31,566,503	27,283,305
Diluted (Loss)/Earnings Per Share	(\$0.32)	(\$0.01)
Diluted Weighted Average Number Of Outstanding Shares	31,566,503	27,283,305

Canadian Solar Inc. Unaudited Condensed Consolidated Balance Sheets (In Thousands of U.S. Dollars)

	Dec 31 2008	Dec 31 2007
ASSETS		
Current Assets:		
Cash And Cash Equivalents	115,661	37,667
Restricted Cash	20,622	1,625
Accounts Receivable, Net	50,678	58,637
Inventories	92,683	70,921
Value-Added Tax Recoverable	15,900	12,247
Advances To Suppliers	24,654	28,745
Foreign Currency Derivative Assets	6,974	—
Prepaid and Other Current Assets	10,919	10,058
Total Current Assets	338,091	219,900
Property, Plant and Equipment, Net	165,542	51,486
Intangible Assets	263	136
Deferred Convertible Notes Issuance Costs	36	3,296
Prepayments To Suppliers	43,087	4,103
Prepaid Rental	12,782	1,616
Investments	3,000	
Deferred Tax Assets — Non-Current	6,998	3,966
TOTAL ASSETS	569,799	284,503
LIABILITIES AND STOCKHOLDER'S EQUITY		
Current Liabilities:		
Short-Term Borrowings	99,858	40,374
Accounts Payable	29,957	8,251
Other Payables	24,043	6,153
Advances From Customers	3,571	1,962
Income Tax Payable	1,283	143
Amounts Due To Related Parties	94	209
Other Current Liabilities	2,737	2,121
Total Current Liabilities	161,543	59,213
Accrued Warranty Costs	10,847	3,879
Provision For Uncertain Tax Issue	8,704	2,278
Convertible Notes	1,000	75,000
Long-Term Debt	56,164	17,866
TOTAL LIABILITIES	238,258	158,236
Stockholders' Equity:		
Common Shares	294,707	97,454
Additional Paid-In-Capital	35,538	26,436
Accumulated Deficit	(13,613)	(3,604)
Accumulated Other Comprehensive Income	14,909	5,981
TOTAL STOCKHOLDERS' EQUITY	331,541	126,267
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	569,799	284,503