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 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of February 2015

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 office)

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

Form 20-F 🖾 Form 40-F 🗖

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):

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):

CANADIAN SOLAR INC.

Form 6-K

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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: February 3, 2015

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EXHIBIT INDEX

Exhibit 99.1 — Press Release

💒 CanadianSolar

Canadian Solar to Acquire Recurrent Energy from Sharp Corporation for \$265 Million

- Acquisition adds 4.0 GW and expands Canadian Solar's total project pipeline to 8.5 GW
- Approximately 1.0 GW of late-stage projects represent a revenue opportunity of at least \$2.3 billion over the next 2 years

GUELPH, Ontario, February 2, 2015 — Canadian Solar Inc. (the "Company", or "Canadian Solar") (NASDAQ: CSIQ), one of the world's largest solar power companies, today announced that it has entered into a definitive agreement with Sharp Corporation (TSE: 6753) to acquire Recurrent Energy, LLC ("Recurrent"), a leading North American solar energy developer, for approximately \$265 million.

Once completed, the acquisition of Recurrent will increase Canadian Solar's total solar project pipeline by approximately 4.0 GW to 8.5 GW, and its latestage project pipeline by approximately 1.0 GW to 2.4 GW. Located in California and Texas, Recurrent's 1.0 GW late-stage pipeline is one of the largest utility-scale project portfolios scheduled to be built prior to the ITC expiration in 2016, and represents an estimated revenue opportunity of at least \$2.3 billion for Canadian Solar under a build and sell business model.

The transaction further expands Canadian Solar's position as a leading solar energy developer, with a globally diversified project pipeline in low risk geographies. In addition, this transaction broadens Canadian Solar's project development and financing capabilities, and enhances the Company's position for creating its own Yield-Co in the quarters ahead.

"The acquisition of Recurrent is an important milestone for us as it significantly expands and strengthens our position in the North American market, and places Canadian Solar firmly among the leading global solar energy companies," said Dr. Shawn Qu, Canadian Solar Chairman and Chief Executive Officer. "By combining Canadian Solar's global reach and experience with Recurrent's proven solar energy development track record in the US and Canada, we are significantly expanding the scale of our solar energy development platform. At the same time, this transaction broadens our strategic options to extend our business model from development and construction into potential ownership and operation of solar power plants as we work to create additional value for our shareholders."

"Canadian Solar is a key player in the industry and we are fortunate that our collective visions for the future of the solar market are very much aligned," said Arno Harris, Recurrent Energy Chief Executive Officer. "We look forward to close collaboration with our new parent company to bring solar power further into mainstream energy markets."

Transaction Details

Total consideration for the acquisition of Recurrent is approximately \$265 million in cash. The transaction is expected to close prior to the end of the first quarter of 2015, subject to customary closing conditions and regulatory approvals.

Credit Suisse acted as sole financial advisor and Foley & Lardner LLP acted as legal counsel to Canadian Solar. Scotia Capital (USA) Inc. acted as lead financial advisor to Sharp Corporation and Recurrent. The Bank of Tokyo-Mitsubishi UFJ, Ltd./MUFG Americas also acted as financial advisor to Sharp Corporation. Orrick, Herrington & Sutcliffe LLP acted as legal counsel to Sharp Corporation.

Investor Conference Call

Canadian Solar will host a conference call for investors to discuss the transaction on February 4, 2015 at 8:00 am ET. A replay will be available until February 11, 2015 at 11:59PM ET:

Dial-in information:

Toll-free Dial-In: 1(866) 202-0886 International Dial-In: +1(617) 213-8841 Conference Passcode: 35547056

Replay dial-in information:

Toll-free Dial-In: 1(888) 286-8010 International Dial-In: +1(617) 801-6888 Conference Passcode: 45938032

Webcast link: http://edge.media-server.com/m/p/hsq8tutp/lan/en

About Canadian Solar Inc.

Founded in 2001 in Canada, Canadian Solar is one of the world's largest and foremost solar power companies. As a leading manufacturer of solar photovoltaic modules and provider of solar energy solutions, Canadian Solar has a geographically diversified pipeline of utility-scale solar power projects. In the past 14 years, Canadian Solar has successfully deployed over 8 GW of premium quality modules in over 70 countries around the world. Furthermore, Canadian Solar is one of the most bankable solar energy companies worldwide, having been publically listed on NASDAQ since 2006. For additional information about the company, products, and projects, please visit www.canadiansolar.com.

About Recurrent Energy

Recurrent Energy is redefining what it means to be a mainstream clean energy company, with a fleet of utility-scale solar plants that provide competitive clean electricity. The company has more than 4 GW of solar projects in development in North America. Additional details are available at: www.recurrentenergy.com

About Sharp Corporation

Sharp Corporation is a worldwide developer of innovative products and core technologies that play a key role in shaping the future of electronics. As a leader in liquid crystal displays (LCDs) and digital technologies, Sharp offers one of the broadest and most advanced lines of consumer electronics, information products and electronic components, while also creating new network businesses. Sharp Corporation employs 50,637 people in the world (as of September 30, 2014) and recorded consolidated annual sales of 2,927,186 million yen for the fiscal year ended March 31, 2014. For more information, please visit Sharp's Web site at http://sharp-world.com

Safe Harbor/Forward-Looking Statements

Certain statements in this press release 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 the risks regarding general business and economic conditions and the state of the solar industry; risks associated with any acquisition or disposition activities; the successful integration of acquired companies; governmental support for the deployment of solar power; future available supplies of solar grade silicon; demand for solar products by consumers and inventory levels of such products in the supply chain; changes in demand from significant customers; changes in demand in our project markets, including Canada, the U.S., Japan and China; changes in customer order patterns; capacity utilization; level of competition; pricing pressure and declines in average selling price; delays in new product introduction; continued success in technological innovations and delivery of products with the features customers demand; utilityscale project approval process delays; utility-scale project construction delays; utility-scale project cancelation due to failure to obtain all the necessary permits; shortage in supply of materials or capacity requirements; availability of financing; exchange rate fluctuations; trade protectionism in Europe, the U.S. and India; litigation and other risks as described in the Company's SEC filings, including its annual report on Form 20-F filed on April 28, 2014. Although the Company believes that the expectations reflected in its forward looking statements are reasonable, it cannot guarantee future results, level of activity, performance, or achievements. Investors should not place undue reliance on these 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.