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 January 2021

Commission File Number: 001-33107

CANADIAN SOLAR INC.

545 Speedvale Avenue West, Guelph, Ontario, Canada N1K 1E6 (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

TABLE OF CONTENTS

Signature

Exhibit Index

Exhibit 99.1

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 and Chief Executive Officer

Date: January 13, 2021

EXHIBIT INDEX

Exhibit 99.1 — Press Release

Section CanadianSolar

Canadian Solar Subsidiary Recurrent Energy Completes Sale and Breaks Ground on the Slate Project, Expected to Be One of the Largest PV + Battery Storage Projects in the U.S.

Project will provide low-cost solar power and grid reliability support to California

GUELPH, ON, January 13, 2021 – Canadian Solar Inc. ("Canadian Solar") (NASDAQ: CSIQ) today announced that its wholly-owned subsidiary, Recurrent Energy, completed the sale of the Slate project to Goldman Sachs Renewable Power LLC ("GSRP"). Revenue from the transaction will be recognized in Q1 2021 and commercial operation is anticipated in late 2021.

The Slate project is a 300 MWac solar plus 140.25 MW / 561 MWh storage project located in Kings County, California, and has commenced construction. Canadian Solar's majority-owned energy storage subsidiary, System Solutions and Energy Storage ("SSES"), will provide the battery storage integration solution for the project. Additionally, PNC Bank is providing a tax equity commitment to the project, which demonstrates its pledge to not only manage its own operations in an environmentally sustainable manner, but also to support clients with innovative financing options as the world transitions to a low-carbon economy.

The project has signed PPAs with five different off-takers, four of which are solar and energy storage, and one that is solar-only.

Dr. Shawn Qu, chairman and CEO of Canadian Solar stated, "The Slate project is Recurrent Energy's largest solar-plus-storage project and represents continued investment in a community where we have done business for nearly a decade. Given the huge market opportunity presented by battery storage, both standalone as well as paired with solar, we have focused significant resources in developing our own technological, servicing and financing solutions over the past few years. We are now starting to see our efforts come to fruition and are solidly positioning Canadian Solar as a market leader in this space. This transaction demonstrates that our SSES team is now a top bankable battery storage solutions provider with deep technical know-how in solar and battery integration technology. Likewise, the Recurrent Energy team has done an excellent job in growing our storage pipeline in the U.S. which is currently over 4 GWh."

Dr. Qu added, "Having recently transacted with Goldman Sachs Renewable Power on our first large-scale storage integration and long term service agreement for the neighboring Mustang project, after the project sale in 2019, we are pleased to partner again with GSRP on the Slate project, expected to be one of the largest integrated solar-plus-storage projects in the U.S."

Jon Yoder, Head of the Renewable Power Group of Goldman Sachs Asset Management, said "We are very excited to partner with Canadian Solar once again on a landmark project that will provide a significant new source of clean, renewable energy to California and a battery storage system that will help facilitate California's transition to a carbon free power grid."

The Slate project will generate enough low-cost, clean energy to power approximately 126,000 California homes. The power plant will utilize approximately 962,000 of Canadian Solar's high efficiency bifacial BiKu modules across approximately 2,400 acres in Kings County, California.

Dr. Qu added, "We applaud our Slate customers for their commitment to use solar generation coupled with expanded storage capacity to enable a cleaner energy economy and brighter future in California. As solar-plus-storage installations in the US are expected to nearly triple in 2020 and more than double in 2021, we are pleased to continue to offer flexible and reliable clean energy and grid reliability solutions for our customers and the communities they serve."

The project is expected to employ 405 workers at peak construction, with at least 50% of those construction jobs expected to be filled by local skilled tradesmen from the Kings County area. Along with indirect economic benefits that accompany solar project development, such as increased local spending in the service and construction industries, the Slate project will also have a positive economic impact on the local community by providing significant tax revenues for Kings County.

"This is a landmark solar-with-storage transaction and an exciting opportunity to support our respected clients Canadian Solar and Goldman Sachs Renewable Power," said **Michael Ziemke, managing director of Renewable Energy Finance Group for PNC Bank**. "At PNC, we are proud to do our part to help successfully transition to a low-carbon economy by continuing to support our clients' strategies for more sustainable operations and providing them with the sustainable financing programs they need."

About Canadian Solar Inc.

Canadian Solar was founded in 2001 in Canada and is one of the world's largest solar technology and renewable energy companies. It is a leading manufacturer of solar photovoltaic modules, provider of solar energy and battery storage solutions, and developer of utility-scale solar power and battery storage projects with a geographically diversified pipeline in various stages of development. Over the past 19 years, Canadian Solar has successfully delivered over 49 GW of premium-quality, solar photovoltaic modules to customers in over 150 countries. Likewise, since entering the project development business in 2010, Canadian Solar has developed, built and connected over 5.6 GWp in over 20 countries across the world. Currently, the Company has over 500 MWp of projects in operation, over 5 GWp of projects under construction or in backlog (late-stage), and an additional 11 GWp of projects in pipeline (mid- to early- stage). Canadian Solar is one of the most bankable companies in the solar and renewable energy industry, having been publicly listed on the NASDAQ since 2006. For additional information about the Company, follow Canadian Solar on LinkedIn or visit www.canadiansolar.com.

About Recurrent Energy (Canadian Solar Subsidiary)

Recurrent Energy is a leading utility-scale solar and storage project developer, delivering competitive, clean electricity to large energy buyers. Based in the U.S., Recurrent Energy is a wholly owned subsidiary of Canadian Solar Inc. and functions as Canadian Solar's U.S. project development arm. Recurrent Energy has approximately 5 GW of solar and storage projects in development in the U.S. Additional details are available at www.recurrentenergy.com.

About System Solutions and Energy Storage, SSES (Canadian Solar Subsidiary)

SSES is one of the top providers of turnkey energy storage battery systems and solutions in the world and leverages Canadian Solar's vast experience in developing and executing renewable energy projects to offer highly bankable and competitive integrated energy storage solutions. The division is staffed by energy storage and renewable energy veterans who work closely with leading battery technology partners and project developers to provide innovative storage solutions. Canadian Solar also offers its energy storage customers long term operation and maintenance services including battery capacity augmentation, warranty-wrapped energy capacity and performance guarantees as well as safe and reliable system operations.

About Goldman Sachs Renewable Power LLC

Goldman Sachs Renewable Power LLC is a privately held company managed by the Renewable Power Group of Goldman Sachs Asset Management (GSAM). GSRP is the sponsor of more than 800 solar projects across 27 U.S. states that collectively have a capacity of more than 2.3 gigawatts of clean, renewable power. GSAM's Renewable Power Group is comprised of investment professionals with leading industry expertise across transaction sourcing, financial analysis, power markets and physical asset analysis and operations. The team takes a long-term ownership approach to the operations and management of renewable assets and benefits from Goldman Sachs' extensive network of relationships, leading institutional infrastructure and in-house industry knowledge and experience. The Renewable Power Group is part of GSAM, one of the world's leading asset managers with approximately \$1.9 trillion in assets under supervision globally as of September 30, 2020

About PNC Bank

PNC Bank, National Association, is a member of The PNC Financial Services Group, Inc. (NYSE: PNC). PNC is one of the largest diversified financial services institutions in the United States, organized around its customers and communities for strong relationships and local delivery of retail and business banking including a full range of lending products; specialized services for corporations and government entities, including corporate banking, real estate finance and asset-based lending; wealth management and asset management. For information about PNC, visit www.pnc.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 general business and economic conditions and the state of the solar industry; governmental support for the deployment of solar power; future available supplies 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; changes in demand from major markets such as Japan, the U.S., India and China; changes in customer order patterns; changes in product mix; capacity utilization; level of competition; pricing pressure and declines in average selling prices; delays in new product introduction; delays in utility-scale project approval process; delays in utility-scale project construction; delays in the completion of project sales; delays in the process of qualifying to list the MSS subsidiary in the PRC; 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 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 applicabl