



Japan Credit Rating Agency, Ltd. 18-D-0970

January 23, 2019

- JCR Green Loan Evaluation by Japan Credit Rating Agency, Ltd. -

Japan Credit Rating Agency, Ltd. (JCR) announces the Annual Review results of its Green Loan Evaluation.

# JCR reviewed Green Loan Evaluation on Long-term Loan borrowed by Canadian Solar Infrastructure Fund, Inc.

Subject	:	The existing borrowings by Canadian Solar Infrastructure Investment Fund, Inc.			
Т у р е	:	Long-term Loan			
Lenders	:	Syndication by Mizuho Bank, Ltd. and Sumitomo Mitsui Banking Corporation as an arranger. Shinsei Bank Limited as an arranger and book runner.			
Amount of Borrowings	:	JPY 15.7 billion			
Interest rate	:	0.845%			
Execution date	:	October 31, 2017			
Final repayment d a t e	:	Corresponding day of 10th year after the borrowing date			
Repayment m e t h o d	:	Partial loan amortization			
Use of Proceeds	:	Payment on acquiring renewable energy generation assets and other related costs.			

## <Green Loan Review Result>

Overall evaluation	Green 1		
Evaluation of Greenness (use of proceeds)	g1		
Evaluation on Management, Operation and Transparency	ml		

# 1. Evaluation Overview

On November 22, 2017, JCR announced its "Green 1" overall evaluation of long-term loan to finance investments in renewable energy generation facilities and associated renewable energy generation facilities of Canadian Solar Infrastructure Fund, Inc. (CSIF). The main summary is as follows.

(Excerpted from the assessment report on November 22, 2017)

Canadian Solar Infrastructure Fund, Inc. (CSIF) is an investment corporation listed on the Infrastructure Fund Market of the Tokyo Stock Exchange on October 30, 2017. CSIF intends to invest primarily in renewable energy

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power generating facilities (defined by the Japanese act on Special Measures Concerning Procurement of Electricity from Renewable Energy Sources by Electric Utilities, Article 2, Paragraph 3), real estate and securities related to the renewable energy generating facilities. The sponsor and asset management company of CSIF are Canadian Solar Project K.K. and Canadian Solar Asset Management K.K., respectively.

JCR evaluates the long-term borrowings pursuant to the financial policy of CSIF. The assets acquired through proceeds from these borrowings are 13 solar power generating facilities selected in accordance with the investment policy of CSIF. JCR confirmed that the technical due diligence report, soil contamination report etc. were undertaken by third party companies. According to these reports, JCR found that these projects have little possibilities that the negative impacts on the environment may surpass the positive impacts and JCR considered it as a green project which largely contribute to  $CO_2$  emission reduction.

#### (Extract ended)

JCR has confirmed that 13 CSIF solar power generating facilities acquired through this loan are doing operation without problems. In addition, we reviewed the "Monthly Solar Power Generation and CO<sub>2</sub> Reduction Data" released by the CSIF every month, and confirmed that the total amount of power generated from the 13 applicable solar power plants exceeded the amount assumed in the Initial Technical Due Diligence Report.

As a result JCR maintains "g1" for "Greenness Assessment (Use of Proceeds)" and "m1" for "Management, Operation and Transparency Assessment". Consequently, JCR maintains "Green1" as an overall evaluation result of the long-term Borrowings. Detailed evaluation results are discussed in detail in the next chapter. This loan is considered to meet the criteria for items in Green Loan Principle and MOE's Green Bond Guidelines.<sup>12</sup>

# 2. Post-Borrowing Review Items

This chapter describes the items to be reviewed in the post-borrowing review. Compared with the previous assessment, the review focuses on items whose situations or information has been updated.

(1) Use of Proceeds (Status of Appropriation)

JCR evaluates whether the management of proceeds through green loans and the allocation of the proceeds to green projects were executed in an appropriate manner determined by the borrower at the time of the Green Loan Evaluation.

(2) Appropriateness and Transparency concerning selection standard and processes of the use of proceeds.

JCR evaluates whether there are any changes in the objectives to be achieved through green loans, the selection criteria for green projects, the appropriateness of the process, and a series of processes.

(3) Appropriateness and Transparency of management of the proceeds

JCR evaluates whether it has been ensured that the proceeds through green loans allocated to the green projects and a mechanism and internal system are in place to enable easy tracking and management of the allocation of proceeds.

(4) Reporting

JCR evaluates whether the disclosure system for investors, etc. before and after the borrowing of green loan is planned in a detailed and effective manner at the time of the issuance of green loan.

<sup>&</sup>lt;sup>1</sup> LMA (Loan Market Association), APLMA(Asia Pacific Loan Market Association) Green Loan Principles 2018

<sup>&</sup>lt;sup>2</sup> Ministry of the Environment Green Bond Guidelines 2017



(5) Organization's Environmental Activities

JCR evaluates whether the management continues to address the environmental issues as a high prioritized managerial theme t.

# 3. Contents of review

## (1) Use of proceeds (Status of Appropriation)

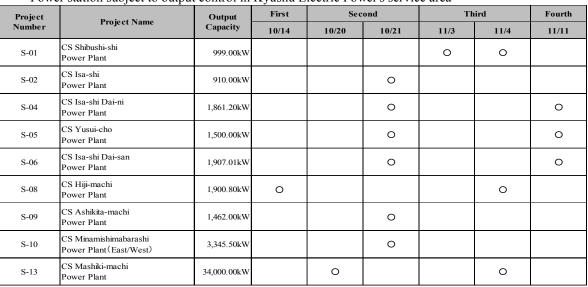
a. The assets to be assessed in this subject were 13 solar power generating facilities (CS Minamishimabara-shi Power Plant (East) and (West) are counted as a single power plant).

Project Name	Location	Output Capacity	Annual Power Generation (estimate)	Annual Power Generation (actual) (17/11~18/10)	
1 oject i dalle	Location	output outputty	(1st year)		
CS Shibushi-shi	Shibushi-shi,	999.00kW	Approx.	Approx.	
Power Plant	Kagoshima	999.00KW	1,432MWh	1,481MWh	
CSS Isa-shi	Isa-shi,	910.00kW	Approx.	Approx.	
Power Plant	Kagoshima	910.00KW	1,077MWh	1,162MWh	
CS Kasama-shi	Kasama-shi,	1.965.60kW	Approx.	Approx.	
Power Plant	Ibaraki	1,905.00K W	2,447MWh	2,407MWh	
CS Isa-shi Dai-ni	Isa-shi,	1.861.20kW	Approx.	Approx.	
Power Plant	Kagoshima	1,001.20KW	2,469MWh	2,422MWh	
CS Yusui-cho	Aira-gun,	1,500.00kW	Approx.	Approx.	
Power Plant	Kagoshima	1,500.00KW	2,113MWh	2,079MWh	
CS Isa-shi Dai-san	Isa-shi,	1.907.01kW	Approx.	Approx.	
Power Plant	Kagoshima	1,907.01KW	2,667MWh	2,708MWh	
CS Kasama-shi Dai-ni	Kasama-shi,	1,965.60kW	Approx.	Approx.	
Power Plant	Ibaraki	1,705.00KW	2,416MWh	2,404MWh	
CS Hiji-machi	Hayami-gun,	1.900.80kW	Approx.	Approx.	
Power Plant	Oita	1,700.00KW	3,169MWh	3,378MWh	
CS Ashikita-machi	Ashikita-gun,	1,462.00kW	Approx.	Approx.	
Power Plant	Kumamoto	1, <del>1</del> 02.00K W	2,755MWh	2,806MWh	
CS Minamishimabara-shi	Minamishimabara-shi,	1,890.50kW		Approx. 5,148MWh	
Power Plant (East)	Nagasaki	1,670.50KW	Approx.		
CS Minamishimabara-shi	Minamishimabara-shi,	1,455.00kW	4,878MWh		
Power Plant (West)	Nagasaki	1,455.00KW			
CS Minano-machi	Chichibu-gun,	1.990.00kW	Approx.	Approx.	
Power Plant	Saitama	1,770.00K W	3,129MWh	2,897MWh	
CS Kannami-cho	Tagata-gun,	1,330.00kW	Approx.	Approx.	
Power Plant	Shizuoka	1,550.00K W	1,601MWh	1,574MWh	
CS Mashiki-machi	Kamimashiki-gun	34,000.00kW	Approx.	Approx.	
Power Plant	Power Plant Kumamoto		55,952MWh	56,584MWh	

(List of acquired assets)

(Source: CSIF's Security Registration Statement and technology due diligence report, Estimate of annual power of generation excludes those consumed inside the plant)

- b. All acquired assets are in operation. At CS Minano-machi Power Plant, some power conditioners were temporarily shut down due to the damage to power transmission cables, but they have already been restored.
- c. When Kyushu Electric Power Co., Inc. carried out power control from October to November 2018, power control was also carried out at some of the solar power generation facilities owned by CSIF. Through press releases and hearings by the CSIF, JCR has confirmed both that the impact of power control on the CSIF is minor and CSIF does not intend to discontinue the power sales business due to this impact.



JCF

Power station subject to output control in Kyushu Electric Power's service area

(Source: Composed by JCR from press releases by CSIF)

- d. No serious negative effects on the environment have been identified, such as sediment-related disasters, electric shock damage, and complaints from local residents.
- (2) Appropriateness and Transparency concerning selection standard and processes of the use of proceeds.

Based on interviews with the CSIF and confirmation of the financial statements, JCR evaluates that there was no change from the previous assessment in terms of the criteria for the selection of the use of funds and the processes therefore. JCR also believes that transparency is ensured through the inclusion in the annual securities report.

## (3) Appropriateness and Transparency of management of the proceeds

JCR assesses management of proceeds as appropriate at the time of the previous evaluation. Tracking management of the proceeds is not required because the entire amount of the loan has already been allocated to acquire solar-related equipment.

(4) Reporting

## a. Reporting on the proceeds allocation

JCR confirmed that the status of acquired assets is periodically disclosed in the semi-annual securities report, and that at the time of the previous evaluation, the entire amount of borrowings will be allocated to acquire solar power-related facilities, as confirmed at the hearing with the CSIF. In addition, JCR reviewed the financial statements regarding CSIF reporting and confirmed that this loan was used to finance the acquisition of solar power generation facilities on October 31, 2017.

## b. Impact reporting for environmental benefits

As for the environmental improvement effects, the "Monthly Solar Power Generation and  $CO_2$  Reduction Data" is released on a monthly basis, and it is confirmed that periodic reporting is conducted, such as the disclosure of the  $CO_2$  reduction of the entire portfolio held by CSIF in the report.

The results of environmental improvements, such as the reduction in  $CO_2$  in acquired assets, were calculated at the time of this evaluation last year. In addition, the amount of electricity generated in this

fiscal year (from 17/11 to 18/10) exceeded the amount of electricity generated in the first fiscal year assumed in the technical due diligence report, and it was confirmed that the amount of annual CO<sub>2</sub> reductions calculated based on the amount of electricity generated in this fiscal year exceeded the amount of CO<sub>2</sub> reductions originally assumed.

JCE

(5) Organization's environmental activities

CSIF's parent company, Canadian Solar, Inc. (CSI), contributes more broadly and deeply to environmental and social considerations. According to the 2016 Sustainability Report released in December 2017, the company achieved the following results in terms of environmental and social considerations.

- i. CSI's own PV plant (photovoltaic power plant) increased its power generation by about 20 times in two years.
- Ii. Water usage was reduced by approximately 52% per MW in two years compared to 2014.
- Iii. Wastewater volumes decreased approximately 65% per MW in two years compared to 2014.
- Iv. Compared to 2011, CO<sub>2</sub> emissions per 1KW were reduced by approximately 41%.

CSI has also achieved excellent results in terms of social considerations.

- i. A third party was selected as one of the most attractive employers in Canada at the 2016 Randstad Awards, which award companies with the highest employment brand to the world's largest surveys under universal standards.<sup>3</sup>
- Ii. Ranked No. 1 in the ranking of social responsibility at the Randstad Awards.
- Iii. During 2016, we trained a total of (approximately 11,000) staff of all employers or more.

A clear commitment by management to environmental and social considerations is made.

Chairman and CEO Dr. Shawn Qu describe environmental and social considerations as follows:

As one of the world's photovoltaic manufacturers, we are involved in sustainable development in all aspects of our day-to-day business. Smart development according to the big picture will lead us to a better future."

CSIF is in compliance with the environmental and social policies of the above CSIs.

# 4. Conclusion

After reviewing the items described in the previous section, JCR confirmed that 100% of the long-term loan was allocated to the Green Project, which was originally expected to be used for proceeds, and that the environmental improvement effects of the assets subject to funding had been sufficiently realized.

<sup>&</sup>lt;sup>3</sup> In Japan, Nissin Foods Holdings, Toyota Motor, Suntory Holdings, and others have won the award.



		Management, operation and transparency					
		ml	m2	m3	m4	m5	
	g1	Green 1	Green 2	Green 3	Green 4	Green 5	
Greenness g2 g3 g4	g2	Green 2	Green 2	Green 3	Green 4	Green 5	
	Green 3	Green 3	Green 4	Green 5	Not qualified		
	g4	Green 4	Green 4	Green 5	Not qualified	Not qualified	
	g5	Green 5	Green 5	Not qualified	Not qualified	Not qualified	

#### [JCR Green Loan Evaluation Matrix]

Evaluation Subject

Borrower: Canadian Solar Infrastructure Fund, Inc. (Security Code: 9284)

[Review]

Target	Amount borrowed	Execution Date	Final Repayment Date	Interest rate	Evaluation
Long-term loan	JPY 15.7 Billion	October 31, 2017	10 years from the effective date of this loan		JCR Green Loan EvaluationGreen1Greenness evaluationg1Management, operation and transparency m1

Sustainable Finance Analysts in charge of this evaluation: Atsuko Kajiwara and Kosuke Kajiwara

#### Important explanation of the Green Loan Evaluation

1. Assumptions, meaning, and Limits of JCR Green Loan Evaluation

JCR Green Loan Evaluation, which is granted and provided by Japan Credit Rating Agency (JCR), is a comprehensive expression of JCR's current opinion on the extent to which the funds procured from the issuance of green loan, which are subject to evaluation, are allocated to green projects defined by JCR and the extent to which the management, operation, and transparency of the use of green bonds are ensured. JCR Green Loan Evaluation does not fully indicate the extent to which the funds procured from such green loans are allocated and the management, operation, and transparency of the use of the funds are ensured.

JCR Green Loan Evaluation evaluates the appropriateness of financing after the procurement of Green Loans and the appropriateness of impact reporting, and does not guarantee the appropriateness of funds in the future. In addition, JCR Green Loan Evaluation does not prove the environmental effects of green loans and is not responsible for their environmental effects. JCR confirms that the effects of the funds procured from the issuance of green bonds on the environment are measured quantitatively and qualitatively by the borrower or by a third party requested by the borrower, but in principle it does not directly measure the effects.

2. Methods used in the conduct of this evaluation

The methods used in this evaluation are listed on JCR website (Sustainable Finance & ESG in https://www.jcr.co.jp/en)) as JCR Green Finance Evaluation Method.

3. Relationship with Acts Related to Credit Rating Business

The JCR Green Loan Evaluation is determined and provided by JCR as a related business, which is different from the activities related to the credit rating business.

4. Relationship with Credit Ratings

The Assessment differs from the Credit Rating and does not promise to provide or make available for inspection a predetermined Credit Rating.

5. Third-Party character of JCR'

There is no conflicts of interest related to capital or human resources relationships between the subject of this evaluation and JCR.

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Glossary

JCR Green Loan Evaluation: JCR Green Loan Evaluation evaluates the extent to which the funds procured from the Green Loan are allocated to the Green Project as defined by JCR, and the extent to which the management, operation, and transparency of the Green Loan are ensured. Evaluations are graded on a scale of 5, beginning with the top, using the Green1, Green2, Green3, Green4, and Green5 symbols.

#### Status of registration as an external reviewer of green finance

- Ministry of the Environment's external green bond reviewer registration
- · ICMA (registered as an observer with the International Capital Markets Association)
- ■Status of registration as a credit rating agency, etc.
  - Credit Rating Agency: the Commissioner of the Financial Services Agency (Rating) No.1
  - EU Certified Credit Rating Agency

 NRSRO: JCR has registered with the following four of the five credit rating classes of the Securities and Exchange Commission's NRSRO(Nationally Recognized Statistical Rating Organization. (1)Financial institutions, broker dealers, (2) insurance companies, (3) general business corporations, and (4) government and local governments. If the disclosure is subject to Section 17 g-7(a) of the Securities and Exchange Commission Rule, such disclosure is attached to the news releases posted on the JCR website (https://www.jcr.co.jp/en).

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