

Green Bond / Green Bond Programme

Independent External Review Form

Section 1. Basic Information

Issuer name:

JA Solar Japan Co., Ltd.

Green Bond ISIN or Issuer Green Bond Framework Name, if applicable:

JA Solar Green Project Bond Trust (Fukushima) Beneficial Interests

Independent External Review provider's name:

Japan Credit Rating Agency, Ltd.

Completion date of this form:

February 13, 2019

Publication date of review publication:

February 13, 2019

Section 2. Review overview

SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review.

The review assessed the following elements and confirmed their alignment with the GBPs:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Use of Proceeds | <input checked="" type="checkbox"/> Process for Project Evaluation and Selection |
| <input checked="" type="checkbox"/> Management of Proceeds | <input checked="" type="checkbox"/> Reporting |

ROLE(S) OF INDEPENDENT EXTERNAL REVIEW PROVIDER

- | | |
|--|--|
| <input type="checkbox"/> Second Party Opinion | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification | <input checked="" type="checkbox"/> Scoring/Rating |
| <input type="checkbox"/> Other (please specify): | |

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW (if applicable)

JA Solar Japan Co., Ltd. ("the Company") is a solar module sales company established in July 2012. The Company is a wholly-owned subsidiary of JingAo Solar Co., Ltd., a Chinese solar module manufacturer established in 2005 (hereinafter, "JA Solar Group", including JingAo Solar Co., Ltd. and JA Solar Japan, Inc). In 2017, JA Solar Group shipped 7.6 GW of solar modules, and it operates globally, primarily in China, Japan, and the United States. It shipped a cumulative 3.3 GW of modules to Japan by the end of June 2018. In addition to selling solar modules, JA Solar Japan Co., Ltd. also develops and operates solar power generation facilities in Japan.

The scope of this evaluation is beneficial interests backed by a solar power generation facility developed by JA Solar Japan Co., Ltd. in Fukushima Prefecture.

Fukushimanakamori Solar Power LLC ("Project GK") procures funds from a silent partnership investment from JA Solar Japan Co., Ltd. and a loan from Hitachi Capital Trust Corporation and pays the cost of the solar power generation facility. Loans from Hitachi Capital Trust are backed by the proceeds, and when providing loans to Project GK, the conclusion of various contracts etc. are condition precedent.

During the loan period, the proceeds from the sale of the solar power generation facility are used to pay dividends and to redeem the principal to the beneficiary interests in a manner predetermined by the trust agreement.

As stated above, the proceeds from the issuance of the beneficiary interests will be used for the construction and development of the solar power generation facility to be operated by Project GK ("construction funds, etc."). JCR confirmed that a department of JA Solar Japan Co., Ltd. is scrutinizing the outline of the solar power generation facility and the risks assumed in the construction and management of the solar power generation facility. As a result, JCR assessed the project as a green project that has a low probability of having a negative environmental impact that exceeds the environmental improvement effect and greatly contributes to reduce CO2 emissions. JCR also confirmed that the fund management system and transparency regarding the beneficiary interests are high, and that JA Solar Group and JA Solar Japan, Co., Ltd. recognize environmental issues as important issues and conduct business activities.

As a result, based on the JCR Green Finance Evaluation Methodology, JCR assigns "g1" for "Greenness Evaluation (use of proceeds)" and "m1" for "Management, Operation and Transparency Evaluation" with regard to the beneficiary interests. Consequently, JCR assigns "Green1" for overall "JCR Green Bond Evaluation." Detailed evaluation results are discussed in detail in the next chapter.

The beneficiary interests meet the standards for the Green Bond Principles and the items required by the Ministry of the Environment's Green Bond Guidelines.

<https://www.jcr.co.jp/en/greenfinance/>

Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

1. USE OF PROCEEDS

Overall comment on section (if applicable):

a. On the environmental improvement effects of the project

- i. 100% of the proceeds are used for the construction of a solar power generation facility, which has high CO₂ reduction effects.
- ii. The Solar power generation facility is expected to operate as scheduled.
- iii. Use of the proceeds falls under the category of renewable energy among green projects as defined in the Green Bond Principles or the Ministry of the Environment's Green Bond Guidelines.

b. Negative impact on Environment

JA Solar Japan Co., Ltd. conducts preliminary investigations through technical due diligence reports and other means, assuming risks that could have a negative impact on the selection of projects to be covered by the beneficial interests. As a result of the preliminary survey, no negative impact on the environment is anticipated at the facility, which is the subject of the use of proceeds.

Use of proceeds categories as per GBP:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Renewable energy | <input type="checkbox"/> Energy efficiency |
| <input type="checkbox"/> Pollution prevention and control | <input type="checkbox"/> Environmentally sustainable management of living natural resources and land use |
| <input type="checkbox"/> Terrestrial and aquatic biodiversity conservation | <input type="checkbox"/> Clean transportation |
| <input type="checkbox"/> Sustainable water and wastewater management | <input type="checkbox"/> Climate change adaptation |
| <input type="checkbox"/> Eco-efficient and/or circular economy adapted products, production technologies and processes | <input type="checkbox"/> Green buildings |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs | <input type="checkbox"/> Other (please specify): |

If applicable please specify the environmental taxonomy, if other than GBPs:

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

JA Solar Japan Co., Ltd. has a clear environmental goal, project selection criteria and process to determine the proceeds, which are shown in the evaluation report composed by JCR.

Evaluation and selection

- | | |
|--|---|
| <input checked="" type="checkbox"/> Credentials on the issuer's environmental sustainability objectives | <input checked="" type="checkbox"/> Documented process to determine that projects fit within defined categories |
| <input checked="" type="checkbox"/> Defined and transparent criteria for projects eligible for Green Bond proceeds | <input checked="" type="checkbox"/> Documented process to identify and manage potential ESG risks associated with the project |
| <input checked="" type="checkbox"/> Summary criteria for project evaluation and selection publicly available | <input type="checkbox"/> Other (please specify): |

Information on Responsibilities and Accountability

- | | |
|---|---|
| <input type="checkbox"/> Evaluation / Selection criteria subject to external advice or verification | <input checked="" type="checkbox"/> In-house assessment |
| <input type="checkbox"/> Other (please specify): | |

3. MANAGEMENT OF PROCEEDS

Overall comment on section (if applicable):

The proceeds of the beneficial interests will be fully allocated to the loan to Project GK from the Hitachi Capital Trust. Under the loan agreement, the loan will be used to fund the development and construction of the facility. The loan will be provided to the GK immediately after the delivery of the beneficiary interests. The loan agreement allows the GK to withdraw the loan from the escrow account multiple times if the terms specified in the loan agreement are met. There is no need to determine the way to manage the allocated portion, since there will be no unallocated funds.

Project GK can sell the facility that is subject to the use of proceeds after a certain period of time since the issuance of the beneficial interests. In this case, the loan borrowed by Project GK will be prepaid and the beneficial interests will be redeemed with the proceeds of such repayment. As a result, no unallocated portion will be generated during the period.

Tracking of proceeds:

- | |
|---|
| <input checked="" type="checkbox"/> Green Bond proceeds segregated or tracked by the issuer in an appropriate manner |
| <input checked="" type="checkbox"/> Disclosure of intended types of temporary investment instruments for unallocated proceeds |
| <input type="checkbox"/> Other (please specify): |

Additional disclosure:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Allocations to future investments only | <input type="checkbox"/> Allocations to both existing and future investments |
| <input type="checkbox"/> Allocation to individual disbursements | <input type="checkbox"/> Allocation to a portfolio of disbursements |
| <input type="checkbox"/> Disclosure of portfolio balance of unallocated proceeds | <input type="checkbox"/> Other (please specify): |

4. REPORTING

Overall comment on section (if applicable):

a. Reporting on proceeds allocation

As confirmed in the preceding paragraph, the entire amount of the proceeds will be allocated in a lump sum to the funds for the construction of the facility through the loans to Project GK. Therefore, it is not currently assumed that the report on the unallocated funds will be made during the term.

b. Reporting on environmental improvement effects

An overview of the target solar PV facilities is provided in the List of Funds in Evaluation Phase 1 of this report. In the O & M report distributed by the trustee, Hitachi Capital Trust, to investors, JA Solar plans to regularly disclose the amount of CO₂ reductions calculated based on the theoretical value of power generation and the prescribed calculation method.

Use of proceeds reporting:

☒ Project-by-project

☐ Linkage to individual bond(s)

Information reported:

☒ Allocated amounts

☐ Other (please specify):

Frequency:

☐ Annual

☒ Other (please specify): Monthly

☐ On a project portfolio basis

☐ Other (please specify):

☐ Green Bond financed share of total investment

☐ Semi-annual

Impact reporting:

☒ Project-by-project

☐ Linkage to individual bond(s)

Frequency:

☐ Annual

☒ Other (please specify): Monthly

☐ On a project portfolio basis

☐ Other (please specify):

☐ Semi-annual

Information reported (expected or ex-post):

☒ GHG Emissions / Savings

☐ Decrease in water use

☐ Energy Savings

☐ Other ESG indicators (please specify):

Means of Disclosure

- | | |
|--|--|
| <input type="checkbox"/> Information published in financial report | <input checked="" type="checkbox"/> Information published in sustainability report |
| <input type="checkbox"/> Information published in ad hoc documents | <input type="checkbox"/> Other (<i>please specify</i>): |
| <input type="checkbox"/> Reporting reviewed | |

Where appropriate, please specify name and date of publication in the useful links section.

USEFUL LINKS (*e.g. to review provider methodology or credentials, to issuer's documentation, etc.*)

The website about CSR efforts of JA Solar Group
<http://www.jasolar.com/index.php?m=content&c=index&a=lists&catid=61>

JCR's website about green bond evaluation methodology
<https://www.jcr.co.jp/en/greenfinance/>

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE

Type(s) of Review provided:

- | | |
|---|--|
| <input type="checkbox"/> Second Party Opinion | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification | <input checked="" type="checkbox"/> Scoring/Rating |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

Review provider(s):

Japan Credit Rating Agency, Ltd.

Date of publication:

February 13, 2019

ABOUT ROLE(S) OF INDEPENDENT REVIEW PROVIDERS AS DEFINED BY THE GBP

1. **Second Party Opinion:** An institution with environmental expertise, that is independent from the issuer may issue a Second Party Opinion. The institution should be independent from the issuer's adviser for its Green Bond framework, or appropriate procedures, such as information barriers, will have been implemented within the institution to ensure the independence of the Second Party Opinion. It normally entails an assessment of the alignment with the Green Bond Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, and an evaluation of the environmental features of the type of projects intended for the Use of Proceeds.
2. **Verification:** An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Green Bond proceeds, statement of environmental impact or alignment of reporting with the GBP, may also be termed verification.
3. **Certification:** An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against a recognised external green standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.
4. **Green Bond Scoring/Rating:** An issuer can have its Green Bond, associated Green Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental performance data, the process relative to the GBP, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material environmental risks.