

Star Energy Geothermal Salak, Ltd and Star Energy
Geothermal Darajat II Limited

Climate Bonds Standard Version 3.0

Post-Issuance Verification Report

By Climate Finance Asia Limited

Climate Finance Asia Limited

🏠 Room 1132, 11/F, 133 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong

☎ (852) 2541 5020 ✉ info@climatefinanceasia.com 🌐 www.climatefinanceasia.com

CFin Asia Pte Limited

🏠 133 New Bridge Road Chinatown Point #10-03 Singapore 059413

☎ (65) 6336 8558 ✉ info@climatefinanceasia.com

POST- ISSUANCE VERIFICATION REPORT

Post-Issuance Verification Report for year 2021 for:
The US\$320 million Senior Secured Notes due 2029 and US\$790 million Senior Secured Notes due 2038 (the “Green Bond”)
Issued by Star Energy Geothermal Salak, Ltd and Star Energy Geothermal Darajat II Limited (collectively the “Co-Issuers”)

Introduction and Scope

Star Energy Geothermal Salak, Ltd (“Salak”) and Star Energy Geothermal Darajat II Limited (“Darajat”) (collectively the “Co-Issuers”), are leading geothermal energy producers in Indonesia. Situated in Sukabumi, West Java province, Salak manages Indonesia’s largest geothermal field and is capable of producing 381 MW of electricity. Located in Garut, also in West Java province, Darajat supplies geothermal energy and has an installed capacity of 274.5MW. The Co-Issuers issued a US\$320 million Senior Secured Notes due 2029 and US\$790 million Senior Secured Notes due 2038 (the “Green Bond”) in October 2020. The Co-Issuers commissioned Climate Finance Asia Limited (“CF Asia”/“Verifier”) to compile a Verifier’s Report to verify, for the year 2021 based on the Green Bond’s information in year 2021, whether the issued Green Bond has met the Post-Issuance Requirements of the Climate Bonds Standard issued by the Climate Bond Initiative (the “CBI”).

CRITERIA

Relevant Climate Bonds Standard for this Post-Issuance Verification:

- Climate Bonds Standard (Version 3)
- The Climate Bonds Taxonomy: Sector Eligibility Criteria – Geothermal Projects & Assets

ISSUER'S RESPONSIBILITY

The Co-Issuers are responsible for providing accurate information and documentation relating to:

- Projects that have been funded by the proceeds of the Green Bond
- Technical aspects of the nominated projects & assets
- Internal processes & controls
- Updated reportings

VERIFIER'S RESPONSIBILITY

CF Asia conducted this independent Post-Issuance Verification of the Green Bond issued by the Co-Issuers in accordance with the requirements of the Climate Bonds Standard Version 3.0 and the Climate Bonds Taxonomy's Sector Eligibility Criteria for Geothermal assets, and based on the limited assurance procedures as defined by the International Standard on Assurance Engagements, ISAE 3000 (Revised) - Assurance Engagements other than Audits or Reviews of Historical Financial Information ("ISAE 3000"), issued by the International Auditing and Assurance Standards Board.

This report relies on the information provided by the Issuer to the Verifier: documentation, interviews with selected staff, and explanations presented during the assessment.

CF Asia's approach to assess whether the Issuer's Green Bond meets the Post-Issuance Requirements and Criteria of the Climate Bonds Standard Version 3.0 is as follows:

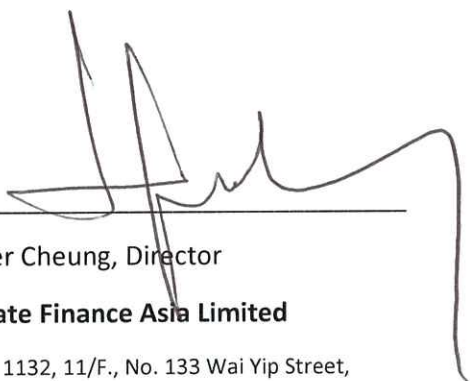
- The Issuer provided background documents of the Green Bond and an overview of the assets that was financed or refinanced by the proceeds of the Green Bond.
- The issuer provided answers to the questionnaire raised and information requested by the Verifier that covers all Post-Issuance requirements and criteria of the Climate Bonds Standard V 3.0.
- Based on the answers to the questionnaire and information documents provided, the Verifier carried out an assessment in accordance with the requirements and criteria of the Climate Bonds Standard. In case any answers were unclear or additional information required, the Verifier contacted the Issuer for more details and clarification.

INDEPENDENCE

With the exception of this task, the Verifier provides no other services relating to the Co-Issuers' operation and green finance instruments. The Verifier has applied internal procedures to confirm no conflicts of interest for this verification engagement. Neither the Verifier nor any Verifier's representatives is/ are involved in the arrangement and management of the Green Bond in any form.

OPINION

Based on the limited assurance procedures conducted and evidence obtained, nothing has come to our attention that causes us to believe that, in all material respects the Co-Issuers' Green Bond for the year 2021, is not in conformance with the Climate Bonds Standard's Post-Issuance Requirements.



Water Cheung, Director

Climate Finance Asia Limited

Room 1132, 11/F., No. 133 Wai Yip Street,

Kwun Tong, Kowloon, Hong Kong

Tel: (852) 2541 5020

Email: info@climatefinanceasia.com

30th March 2023

Disclaimer

This verification report shall be read in the context of the inherent limitations of its intended use of the Issuer and Climate Bonds Standard Board.

The scope of verification is limited to the confirmation of information substantiated as evidence and criteria outlined in the Framework. With the exception of reviewing documents and interviewing selected staff of the Issuer, the Verifier did not conduct any site visit at Nominated Projects and Assets.

This report does not assure the financial performance or the value of the bond. The Verifier is not liable for the induced consequences when third parties use this opinion either to make investments decisions or any kind of business transaction.

Climate Finance Asia Limited

🏠 Room 1132, 11/F., 133 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong

☎ (852) 2541 5020 ✉ info@climatefinanceasia.com 🌐 www.climatefinanceasia.com

CFin Asia Pte Limited

🏠 133 New Bridge Road Chinatown Point #10-03 Singapore 059413

☎ (65) 6336 8558 ✉ info@climatefinanceasia.com

ANNEX: DETAILED FINDINGS

5. USE OF PROCEEDS

REQUIREMENT	FACTUAL FINDINGS	ERROR OR EXCEPTIONS IDENTIFIED
<p>5.1 Net proceeds shall be allocated to Nominated projects & assets</p>	<p>The entire proceeds of US\$1,110 million from the Green Bond was fully allocated to the nominated geothermal assets of Salak and Darajat, including repayment of the outstanding indebtedness and related early termination expenses of the Existing Senior Debt Facilities for the Salak and Darajat geothermal assets, the funding of the Debt Service Reserve Accounts and Major Maintenance Reserve Accounts, and general corporate purposes relating to the Darajat and Salak Geothermal Operations (including, but not limited to, working capital requirements, future investments in power plants and other equipment, and other distributions of available cash in accordance with their distribution policies).</p>	<p>None</p>
<p>5.2 Nominated Projects & Assets in conformance with the Bond’s documented objectives and requirements of Part C of the Climate Bonds Standard</p>	<p>The full amount of the net proceeds was used to finance or refinance geothermal projects which are in conformance with the Geothermal Sector Eligibility Criteria as required under Part C of the Climate Bonds Standard.</p>	<p>None</p>
<p>5.3 Allocation of proceeds within 24 months of issuance of the bond</p>	<p>The full amount of the net proceeds of the Green Bond were allocated to finance or refinance the nominated projects & assets within 24 months of issuance of the Green Bond.</p>	<p>None</p>

	REQUIREMENT	FACTUAL FINDINGS	ERROR OR EXCEPTIONS IDENTIFIED
5.4	Nominated Projects & Assets shall not be nominated to other Certified Climate Bonds/ Loans/Debt Instruments.	Nominated projects and assets refinanced by the proceeds of this bond have not been nominated for other Certified Climate Bonds, Certified Climate Loans, Certified Climate Debt Instruments, green bonds, green loans or other labeled instruments.	None
5.5	The Issuer shall track the share of the Net Proceeds used for financing and refinancing. This may also include the expected look-back period for refinanced Nominated Projects & Assets.	The net proceeds of this Green Bond were used for around 84% refinancing to repay the outstanding indebtedness incurred for Salak & Darajat geothermal assets, and around 16% for other financing purposes including funding the Debt Service Account and Major Maintenance Reserve Account, and for working capital requirements of the Salak & Darajat geothermal energy generation facilities.	None
5.6	Net Proceeds of the Bond shall be tracked.	The use of proceeds of this Green Bond is tracked via the "Green Bond Register" which shows the Sources and the Uses of the proceeds of the Green Bond.	None
5.7	The Net Proceeds of the Bond shall be no greater than the Issuer's total investment exposure or debt obligation to the Nominated Projects & Assets.	The Net Proceeds of the Bond is no greater than the Co-Issuers' total investment exposure to the Nominated Projects & Assets.	None
5.8	Additional Nominated Project & Assets may be added to the portfolio of Nominated Project & Assets.	No additional nominated projects or assets have been added to the nominated list of projects & assets.	None

6. PROCESS FOR EVALUATION AND SELECTION OF PROJECTS & ASSETS

REQUIREMENT	FACTUAL FINDINGS	ERROR OR EXCEPTIONS IDENTIFIED
<p>The Issuer shall document and maintain a decision-making process which it uses to determine the continuing eligibility of the Nominated Projects & Assets, including:</p> <p>6.1.1) A statement on the Climate-related objectives of the Bond</p> <p>6.1.2) Climate-related objectives of the bond within the context of the issuer's strategy</p> <p>6.1.3) Issuer's rationale for issuance the Bond</p> <p>6.1.4) Process determining whether the Nominated projects & assets meet the eligibility requirement</p> <p>6.1.5) Other information</p>	<p>The Issuer has documented the decision-making process to determine the eligibility of nominated projects and assets as follows: its Financial Compliance and Treasury Department will propose the Use of Proceeds which shall be in line with the agreed Use of Proceeds criteria, and its Environmental and Social Impact Committee will validate and confirm the eligibility.</p> <p>Since the proceeds of the Green Bond has been fully and entirely used for the financing and refinancing of the nominated projects & assets, the Co-Issuers have reported that there was no project evaluation and selection in 2021.</p> <p>The climate-related objectives of the Green Bond is to help reduce Indonesia's overall carbon emissions. Indonesia's energy mix shows that the national electricity grid is still heavily reliant on carbon-intensive electricity. Indonesia's Ministry of Energy and Mineral Resources aims to increase the share of renewable energy in its energy mix to 23% by 2025, up from 13% at 2017 level. The Co-Issuers recognizes the need to take climate action and is well positioned to spearhead the energy transition, having operational geothermal fields of Salak and Darajat with 648MW of combined geothermal capacity. The Co-Issuers believe that geothermal and the natural world can not only co-exist but can encourage healthy, sustainable and environmental practices.</p> <p>Proceeds of the issued Green Bonds, which is in accordance with its Green Bond Framework, will only be used in connection with assets with emissions of less than 100g CO2 per kWh and 35 mgH2S/Nm3 estimated carbon intensity, which compares favorably to the local grid (Jamal's) average emission factor for electricity of over 870g CO2 per kWh in 2019.</p> <p>Excluded Use of Proceeds include:</p> <ul style="list-style-type: none"> - Oil and gas power plant; 	<p>None</p>

REQUIREMENT	FACTUAL FINDINGS	ERROR OR EXCEPTIONS IDENTIFIED
	<ul style="list-style-type: none"> - Clean coal or any other fossil fuel-related technologies; - Nuclear and nuclear related technologies; - Large-scale hydropower plant; - Infrastructure that facilitate the above no.1-4 of energy generation. 	

7. MANAGEMENT OF PROCEEDS

	REQUIREMENTS	FACTUAL FINDINGS	ERROR OR EXCEPTIONS IDENTIFIED
7.1	Net proceeds shall be credited to a sub account and documented	The entire amount of the net proceeds have been entirely allocated to finance or refinance the nominated projects & assets after issuance.	None
7.2	Issuer shall maintain the earmarking process to manage the Net Proceeds allocation to Nominated Projects & Assets.	To keep track of the use of proceeds of the Green Bond, the Issuer has maintained a “Green Bond Register” and has earmarked the proceeds for the respective nominated projects and assets.	None
7.3	The balance of the tracked Net Proceeds shall be reduced by amounts allocated to Nominated Projects & Assets. The balance of unallocated Net Proceeds shall be:	The entire amount of the net proceeds have been fully allocated to finance or refinance the nominated projects & assets, including repayment of the Existing Senior Debt Facilities immediately after the Green Bond issuance.	None
	7.3.1) Held in temporary investment instrument;	As per information from the “Green Bond Framework”, pending allocation, the net proceeds from Green Bond issuances may be temporarily invested or otherwise maintained in cash, cash equivalents, short-term investments that do not include greenhouse gas intensive projects which are inconsistent with the delivery of a low carbon and climate resilient economy, or used for other general corporate purposes in relation to the Salak and Darajat geothermal energy generation facilities.	
	7.3.2) Held in temporary investment instruments of non-GHG intensive projects;		
	7.3.3) Applied to temporarily reduce debt of revolving nature.		

8. REPORTING

	REQUIREMENTS	FACTUAL FINDINGS	ERROR OR EXCEPTIONS IDENTIFIED
8.1	<p>The Issuer shall prepare an Update Report at least annually:</p> <p>8.1.1) available to holders of the Bond and Climate Bonds Standard Board;</p> <p>8.1.2) available to Public;</p> <p>8.1.3) to Holders of the Bond on a timely basis in case of material developments.</p>	<p>The Co-Issuers publishes Annual Green Bond Report, which is made available to the public on the Company's corporate website (www.starenergygeothermal.co.id) on an annual basis.</p>	None
8.2	<p>The Update Report shall include:</p> <p>8.2.1) Allocation Reporting;</p> <p>8.2.2) Eligibility Reporting;</p> <p>8.2.3) should include Impact Reporting.</p>	<p>The Co-Issuers jointly publishes annually the Annual Green Bond Reports, written on the basis of the companies' Green Bond Register and provide the following information:</p> <ul style="list-style-type: none"> - Allocation Reporting: The amount of net proceeds allocated within each Green Bond Asset category, as well as the balance of net proceeds not yet allocated to Green Bond Assets; - Eligibility Reporting: The latest indicator of the environment impact of the nominated projects & assets, for complying to the Sector Eligibility Criteria of Geothermal; - The Co-Issuers have individually provided annually a Sustainability Report. 	None

	REQUIREMENTS	FACTUAL FINDINGS	ERROR OR EXCEPTIONS IDENTIFIED
8.3	Allocation Reporting	<p>The Issuer’s Annual Green Bond Report 2021 showing the Allocation Reporting is as per below website link:</p> <p>https://www.starenergygeothermal.co.id/wp-content/uploads/2022/02/Salak-Darajat-Annual-Green-Bond-Report-2021_Final.pdf</p>	None
8.4	Eligibility Reporting	<p>The eligibility details are available in the Co-Issuers’ Annual Green Bond Report 2021 (website link as per above item 8.3)</p>	None
8.5	Reasons for confidentiality	<p>Detail information about the nominated projects and assets are available in the annual Green Bond Report 2021 which is available to the public via the Company’s website.</p>	None
8.6	Impact Reporting	<p>The Co-Issuer’s Sustainability Report 2021 is available on the Company’s website as per website link below:</p> <ul style="list-style-type: none"> - Sustainability Report for Darajat <p>https://www.starenergygeothermal.co.id/wp-content/uploads/2022/06/SR-DARAJAT-2021_rev.pdf</p> <ul style="list-style-type: none"> - Sustainability Report for Salak <p>https://www.starenergygeothermal.co.id/wp-content/uploads/2022/06/SR-SALAK-2021_rev.pdf</p>	None

	REQUIREMENTS	FACTUAL FINDINGS	ERROR OR EXCEPTIONS IDENTIFIED
8.7	The Issuer shall make available to the public any Verifier Reports or material which supports the Update Report	Relevant Reports and material are publicly available on the Issuer's website.	None
8.8	Information on Nominated Projects & Assets and Management of Proceeds shall be provided to Verifier and Climate Bonds Standard Board for conformance assessment.	Relevant information has been provided.	None

9. PART C: ELIGIBILITY OF PROJECTS & ASSETS – CLIMATE BONDS TAXONOMY

	REQUIREMENTS	FACTUAL FINDINGS	ERROR OR EXCEPTIONS IDENTIFIED
9.1	The Nominated Projects & Assets shall fall into the investment areas listed in the Climate Bonds Taxonomy	The Nominated Projects & Assets falls into “Geothermal” of the Climate Bonds Taxonomy’s Sector Eligibility Criteria.	None

10. PART C: ELIGIBILITY OF PROJECTS & ASSETS – SECTOR ELIGIBILITY CRITERIA

	REQUIREMENTS	FACTUAL FINDINGS	ERROR OR EXCEPTIONS IDENTIFIED
10.1	<p>The Nominated Projects & Assets shall meet the specific eligibility requirements provided in the relevant Sector Eligibility Criteria documents</p>	<p>Sector Eligibility Criteria – Geothermal:</p> <ul style="list-style-type: none"> - Criterion 1 - Direct Operational Carbon Intensity: Facilities with direct emissions of less than 100gCO₂/kWh are deemed to be low emitting, which is comparable with other low carbon options (renewables or nuclear) on a lifecycle basis: <p>As per “Annual Green Bond Report 2021”, the environment impact indicator of the Nominated Projects & Assets as of 2021 indicated that the Co-Issuers’ geothermal electricity generation facility’s direct CO₂ emission were 84.24 g/KWH and 30.03 g/KWH for Salak and Darajat respectively, which are less than the 100g CO₂/KWH threshold and meet the Geothermal Sector Eligibility Criteria;</p> <ul style="list-style-type: none"> - Criteria 3&4 – Environmental, health, safety and social criteria: All projects associated with Climate Bonds must comply with the environmental regulations of the host country. In addition to this requirement we propose additional criteria to enhance EHS and social performance for all projects: <p>As per “Sustainability Report 2021”, the Co-Issuers received a number of awards and certification, including: Green PROPER annual award in 2021 from the Ministry of Environment and Forestry of Indonesia, which is evident for the Co-Issuers’ compliance of environmental regulation from the Government of Indonesia as confirmed by the Co-</p>	None

REQUIREMENTS	FACTUAL FINDINGS	ERROR OR EXCEPTIONS IDENTIFIED
--------------	------------------	--------------------------------

Issuers; Zero-Accident Award (received by Darajat); P2HIV AIDS award; P2 Covid-19 award; ISO 14001:2015; Continued implementation of Integrated Geothermal Operations Management System (IGOMS); Certification of ISO 45001:2018 Occupational Health & Safety Management System, etc.

As per “Sustainability Report 2021”, Darajat II also continues to carry out its mandate in contributing to produce clean air through the Clean Development mechanism (CDM) program. The program, which was started in 2015, has placed Darajat II as a company that obtained the largest Certified Emission Reduction (CER) carbon credit in the geothermal sector.

As per “Annual Green Report 2021”, the Co-Issuers have also established a variety of programmes to demonstrate its high commitment to environmental protection, programmes covering areas of water conservation, energy efficiency, waste reduction, and re-vegetation.

ANNEX: DOCUMENTS REVIEWED

The list of reviewed documents is as follows:

- Star Energy Geothermal Salak, Ltd and Star Energy Geothermal Darajat II Limited – Annual Green Bond Report 2021 (August 2022);
- Star Energy Geothermal Salak, Ltd and Star Energy Geothermal Darajat II Limited – Green Bond Framework (September 2020);
- Star Energy Geothermal Salak, Ltd and Star Energy Geothermal Darajat II Limited: US\$320 million 3.25% Senior Secured Notes due 2029 & US\$790 million 4.85% Senior Secured Notes due 2038 - Green Bond Register;
- Star Energy Geothermal Salak, Ltd and Star Energy Geothermal Darajat II Limited: US\$320 million 3.25% Senior Secured Notes due 2029 & US\$790 million 4.85% Senior Secured Notes due 2038 – Offering Memorandum;
- Star Energy Geothermal (Salak – Darajat) B.V. – Consolidated Financial Statements 31 December 2021;
- Salak & Darajat - GHG Avoided Calculation Excel Table for year 2021;
- Star Energy Geothermal Salak – Sustainability Report 2021
- Star Energy Geothermal Darajat – Sustainability Report 2021

Climate Finance Asia Limited

🏠 Room 1132, 11/F, 133 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong
☎ (852) 2541 5020 ✉ info@climatefinanceasia.com 🌐 www.climatefinanceasia.com

Climate Bonds

Approved Verifier

CFin Asia Pte Limited

🏠 133 New Bridge Road Chinatown Point #10-03 Singapore 059413
☎ (65) 6336 8558 ✉ info@climatefinanceasia.com