

# Carbon Trust Second Party Opinion Statement

To: Star Energy Geothermal Salak, Limited. and Star Energy Geothermal Darajat II, Limited (the "Co-Issuers")

Star Energy Geothermal Salak, Limited, and Star Energy Geothermal Darajat II, Limited Green Bond Framework

25/09/2020



The Carbon Trust's mission is to accelerate the move to a sustainable, low carbon economy. It is a world leading expert on carbon reduction and clean technology. As a not-for-dividend group, it advises governments and leading companies around the world, reinvesting profits into its low carbon mission.

#### Authors:

#### **Morgan Jones**

Head of Assurance, Carbon Trust Morgan.Jones@CarbonTrust.com

#### William Hudson

Head of South East Asia William.Hudson@CarbonTrust.com

#### Lau Xin Yi

Green Finance Lead, South East Asia XinYi.Lau@CarbonTrust.com

#### **Hazim Rosli**

South East Asia Analyst Hazim.Rosli@carbontrust.com

# **Contents**

1.	Summary	3
2.	Abbreviations	3
3.	Terms of Engagement	4
4.	Basis of Opinion	4
5.	Relevant Documentation	5
6.	Management Responsibility	6
7.	Carbon Trust Responsibility	6
8.	Assurance Standards	7
9.	Carbon Trust Assurance Activities	7
10.	Carbon Trust Competence and Independence	7
11.	Carbon Trust Opinion	8
	ASEAN GBS Criteria	8
	Principle One: Use of Proceeds	8
	Principle Two: Process for Project Evaluation and Selection	. 10
	Principle Three: Management of Proceeds	. 10
	Principle Four: Reporting	. 11

# 1. Summary

The Star Energy Geothermal Salak, Ltd., and Star Energy Geothermal Darajat II Limited ("Salak-Darajat") Green Bond Framework September 2020 ("Framework") provides a forward-looking Framework with an objective that is consistent with and supports the Indonesian government's climate and sustainability objectives.

Salak-Darajat has adopted a robust Framework to finance or refinance the development, construction and operation of the Salak-Darajat geothermal energy generation facilities in West Java, Indonesia. The Framework is aligned with the four components of the International Capital Market Association's ("ICMA") 'The Green Bond Principles, Voluntary Process Guidelines for Issuing Green Bonds' (2018) ("GBP"): Use of Proceeds, Process for Project Evaluation and Selection, Management of Proceeds, and Reporting and the Association of Southeast Asian Nations ("ASEAN") Green Bonds Standards ("GBS").

As outlined in the Framework, an estimated proportion of 84% of the net proceeds of the inaugural issuance will be used to refinance Salak-Darajat geothermal assets, with the remainder being used to fund the Debt Service Account and Major Maintenance Reserve Account, and for working capital requirements of the Salak and Darajat geothermal energy generation facilities.

The Bond Co-Issuers have a clear process under the Framework for project evaluation and selection that is in accordance with the ICMA GBP and ASEAN GBS.

Specific to the inaugural transaction, the proceeds of this issuance will be deposited into a secured account in Singapore that is pledged to the lenders of the Existing Senior Debt Facilities, pending repayment of these Facilities. Upon successful repayment, the remainder of the proceeds will be credited to the general funding account of the issuing entities – Star Energy Geothermal Salak Ltd, and Star Energy Geothermal Darajat II Ltd. It is expected that the majority, if not all, net proceeds will be allocated at the time of issuance.

The Framework has a strong governance structure that includes a yearly reporting mechanism, of both Green Bond allocation and impact, as well as external verification of the Co-Issuers' use of proceeds, all of which will be made publicly available.

# 2. Abbreviations

ACMF ASEAN Capital Markets Forum

**ASEAN** Association of South East Asian Nations

ASEAN GBS ACMF ASEAN Green Bonds Standard (2018)

**CBI** Climate Bonds Initiative

CTA Carbon Trust Assurance Limited

GBP Green Bond Principles, Voluntary Process Guidelines for Issuing Green Bonds (2018)

ICMA International Capital Markets Association

**ISAE 3000** International Standard on Assurance Engagements 3000

# 3. Terms of Engagement

Carbon Trust Assurance Limited ("we" or "Carbon Trust") was commissioned to provide a second party opinion regarding the issuance by the Bond Issuer of the Bonds in accordance with the Framework and the Bonds' alignment with the ICMA GBP and ASEAN GBS. Carbon Trust's role was to act as a 'Consultant Reviewer' and provide a second party opinion as defined and contemplated by the ICMA GBP and ASEAN GBS.

Salak-Darajat are part of Star Energy Geothermal Pte Ltd ("Star Energy Group") and is the owner-operator of the Salak-Darajat geothermal energy generation facilities in the Java, Indonesia. Star Energy Geothermal, Salak Ltd. ("Salak") is located around 70km from Jakarta, Indonesia. It supplies geothermal steam to generate electricity from a 180 MW power plant operated by Pertamina Geothermal Energy and PT PLN (Electricity), a state-owned utility company, and also supplies geothermal steam and operates 197 MW power plant that generates electricity for the Java-Madura-Bali grid. Salak commenced commercial operations in 1994, delivering 110 MW to PLN. Salak's capacity more than tripled by 2005 to 377 MW, making it one of the largest geothermal operations globally.

Star Energy Geothermal Darajat II Ltd's ("Darajat") geothermal facility is located near Garut, West Java. It supplies geothermal steam to the 55 MW power plant operated by PT PLN (Electricity), and also supplies geothermal steam and operates 216 MW, contributing electrical power to the Java-Madura-Bali grid. Darajat commenced operations in 1994 with a capacity near 145 MW. In 2009, Darajat Unit III was upgraded and completed, doubling the total capacity of Darajat to 271 MW.

# 4. Basis of Opinion

The Co-Issuers have established the Framework to underpin the Green Bonds and provide evidence that they are structured to meet the principles and criteria laid out in the ICMA GBP and ASEAN GBS. The ICMA GBP and ASEAN GBS are a set of voluntary process guidelines for issuing Green Bonds that "enable capital-raising and investment for new and existing projects with environmental benefits".

The ASEAN GBS outlines specific criteria for Green Bonds to be considered as ASEAN Green Bonds. The criteria states that the Issuer must be an ASEAN Issuer or the eligible Green Projects must be located in any of the ASEAN countries in the case of non-ASEAN issuers. In addition, ASEAN Green Bonds must be originated from any of the ASEAN member countries.

The ICMA GBP and ASEAN GBS are each comprised of four core components and Carbon Trust reviewed the alignment of the Framework with them, namely:

#### **Principle One: Use of Proceeds**

The proceeds of the Green Bonds should be used to finance and/or refinance green projects which should be appropriately described in the legal documentation of the security. All designated green project categories should provide clear environmental benefits, which will be assessed and, where feasible, quantified by the issuer. Eligible green projects are described in the ICMA GBP.

The ASEAN GBS further requires that Issuers disclose: (i) the categories of eligible Green Projects to which the ASEAN Green Bond proceeds will be allocated, and/or (ii) the information on specific Green Projects in the case where the Issuer has identified specific Green Projects to which the ASEAN Green Bonds proceeds will be allocated.

#### Principle Two: Process for Project Evaluation and Selection

Green Bond issuers should outline a process to determine how the projects fit within the eligible green project categories identified in the GBP and the process for determining eligibility and the criteria used. The process should consider the environmental sustainability objectives of the proposed bond.

The ASEAN GBS further requires that Issuers make the process for project evaluation, the use of proceeds, and the external review report on the process publicly available on a website designated by the Issuer at the time of the issuance and throughout the tenure of the ASEAN Green Bonds.

#### **Principle Three: Management of Proceeds**

The net proceeds of Green Bonds should be credited to a sub-account, moved to a sub-portfolio or otherwise tracked by the issuer in an appropriate manner and attested to by a formal internal process linked to the issuer's lending and investment operations for green projects. A declaration should be made as to how any unallocated funds are managed.

The ASEAN GBS further states that where the Issuer appoints an auditor or other third party to verify the Issuer's management of proceeds, the Issuer must make the report produced by the auditor of third party publicly available on a website designated by the Issuer at the time of the issuance of the ASEAN Green Bonds.

#### Principle four: Reporting

Issuers should include a list of the projects to which Green Bond proceeds have been allocated, as well as a brief description of the projects and the amounts allocated, and their expected impact. Issuers are recommended to use qualitative performance indicators and, where feasible, quantitative performance measures and the corresponding underlying methodology used in the quantitative determination.

The ASEAN GBS further states that Issuers must report to investors at least on annual basis and are encouraged to make more frequent reporting on the use of proceeds until full allocation, and on a timely basis in the case of material developments. It is recommended that the issuer's annual reporting on the use of proceeds be supplemented by a confirmation of such use of proceeds by an external reviewer along with any relevant updates of the external review. The issuer must provide to investors the annual reporting and the external review on the annual reporting, if any, through a website designated by the issuer and/or annual reports throughout the tenure of the ASEAN Green Bonds.

# 5. Relevant Documentation

The following information and documents have been reviewed in order to form the basis of the opinion.

- > Salak-Darajat's Green Bond Framework dated September 2020;
- Salak and Darajat's environmental certifications
- A draft of Salak-Darajat's Bond Offering Memorandum as at the date of this opinion ("the Memorandum")
- > Salak and Darajat's environmental policies
- > PT Barito Pacific Sustainability Report<sup>1</sup>

# 6. Management Responsibility

The management of the Issuer are responsible for the following (the "Procedures"):

- Designing, implementing and maintaining internal controls relevant to the preparation and issuance of the Green Bond(s) that are free from material misstatement, whether due to fraud or error;
- Selecting and/or developing a suitable green bond framework to underpin the issuance and management of the Green Bond(s);
- > Developing a suitable eligibility criteria and process for selecting investments;
- > Reporting relevant information on the use of proceeds; and
- > Maintaining alignment with the GBP criteria

# 7. Carbon Trust Responsibility

Carbon Trust's responsibility is to plan and perform work to form an opinion on whether the Framework for the Green Bond has been prepared in accordance with the principles of the GBP, as described in the 'Basis of Opinion', and to report to the issuer in the form of a 'Second Party Opinion' based on the work undertaken and the evidence obtained.

Carbon Trust have not performed any work, and does not express any conclusion regarding the ongoing effectiveness of the application of the Procedures.

<sup>&</sup>lt;sup>1</sup> Star Energy Geothermal Salak, Ltd. and Star Energy Geothermal Darajat II Limited provide inputs and contribute information into the sustainability report of PT Barito Pacific, who are their majority shareholder.

# 8. Assurance Standards

Carbon Trust have worked in accordance with its assurance methodology which is based on the International Standard on Assurance Engagements 300 ("ISAE 3000"). However, this second opinion is not an assurance opinion in accordance with ISAE 3000.

# 9. Carbon Trust Assurance Activities

Carbon Trust's objective is to assess whether Green Bonds issued against the Framework are structured in accordance with the principles of the ICMA GBP and ASEAN GBS. Carbon Trust planned and performed its work to obtain all the information and explanations that deemed necessary to provide a basis for an impartial and informed opinion.

The work included, but was not restricted to:

- > Requested information and evidence from the Bond Co-Issuers and key staff responsible for the arrangement of the Bonds to obtain an understanding of the organisation, its environmental objectives and intended use of proceeds of the Bonds;
- > Reviewed the Bond Co-Issuer's Framework, including processes, systems and controls in place for management of proceeds, investment areas for proceeds and intended types of temporary investment instruments for the management of any unallocated proceeds; and

# 10. Carbon Trust Competence and Independence

Our commitment to impartiality and quality assurance is established in our policies, procedures and management structure. These reflect international standards for quality management and incorporate requirements of the Carbon Trust's accreditation by the United Kingdom Accreditation Service to certify energy management systems. We are an accredited Climate Bonds Initiative verifier. We ensure the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and verification assessments is internally reviewed by senior management to ensure that the approach is rigorous and transparent. As a result, the conclusions in this report reflect an impartial application of the ICMA GBP and ASEAN GBS.

# 11. Carbon Trust Opinion

Based on the work we have undertaken and the evidence provided by the Bond Co-Issuers, we believe that the Bond Co-Issuers' Framework and the Bonds comply with the principles of the ICMA GBP and ASEAN GBS. Set out below are specific findings and statements in relation to the principles and criteria in both the ICMA GBP and ASEAN GBS as they relate to the Bond Co-Issuers' Framework and Bonds issued in accordance with it:

#### ASEAN GBS Criteria

While the Bond Co-Issuers are incorporated in the Bermuda, their eligible Green Assets are located in Indonesia. Additionally, the Issuance originates from an ASEAN country, being listed on the Singapore Exchange.

### **Principle One: Use of Proceeds**

The net proceeds of the Green Bonds issued, after deducting fees, commissions and other estimated offering expenses, will primarily be allocated to the refinancing of the existing Salak-Darajat geothermal assets. This refinancing entails the repayment of all outstanding indebtedness under the Existing Senior Debt Facilities, which were incurred in 2016 for the purposes of funding the acquisition of the Salak-Darajat geothermal assets, and the associated repayment expenses. As outlined in the Framework, the estimated proportion of net proceeds used for refinancing the Salak-Darajat geothermal assets is 84%, while the remaining 16% will be used to fund the Debt Service Account and Major Maintenance Reserve Account, and for working capital requirements of the Salak and Darajat geothermal energy generation facilities. The amounts on deposit in the Debt Service Account will be used to fund the principal and interest payment obligations in respect of the newly issued inaugural Green Bonds, while the amounts on deposit in the Major Maintenance Reserve Account will be used to fund the ongoing major maintenance costs and capital expenditures of the Salak and Darajat geothermal energy generation facilities.

The Framework defines eligible projects as geothermal energy generation facilities that support the objectives of the Indonesian government's sustainability strategy, which includes the commitment to decrease greenhouse gas emissions by 26% by 2020.<sup>2</sup> Proceeds of Bonds issued in accordance with the Framework will only be used in connection with assets with direct emissions of less than 100 gCO<sub>2</sub>/kWh and 35 mgH<sub>2</sub>S/Nm<sup>3</sup>. This compares favourably to the 862 gCO<sub>2</sub>/kWh<sup>3</sup> emissions factor of the "Java-Madura-Bali" grid, which Salak-Darajat supplies to, and the average carbon intensities of coal-fired generation and the global power system at nearly 920g CO<sub>2</sub> per kWh<sup>4</sup> and 463gCO<sub>2</sub>/kWh. In our opinion, these criteria satisfy the requirements of a Green Project under the ICMA GBP and ASEAN GBS and based on information provide to us by the Bond Issuer, the Facility also meets these criteria. Further information on the Facility is set out below.

In summary, the main inputs to the geothermal energy generation process are (i) geothermal steam; and (ii) brine, which comes from geothermal reservoirs. Production wells are drilled into the geothermal reservoirs to extract the naturally occurring hot fluid from underground. Depending on

https://jcm.ekon.go.id/en/uploads/files/Document%20JCM/Rules%20&%20Guidelines/Emission Factor DJK ESDM 2016.pdf

<sup>&</sup>lt;sup>2</sup> First Nationally Determined Contribution, Republic of Indonesia, November 2016.

<sup>3</sup> 

<sup>&</sup>lt;sup>4</sup> International Energy Agency, 2019

the type of reservoir, when this fluid is produced at the surface, it consists of either (i) pure steam (from vapor-dominated reservoirs like Darajat's); or (ii) a mixture of steam and brine (from liquid-dominated reservoirs like Salak's).

If the fluid is a mixture of steam and brine, it is must first be passed through the resource production facilities, where separators use centrifugal forces and gravity to separate the steam from the brine, and then to the electricity generation facilities. On the other hand, if the fluid is pure steam, there are no separators and other brine-related facilities required.

In the electricity generation facilities, the steam is then directed at high velocity into a series of turbine blades, which drive the turbine shaft that is coupled to a generator. The electricity generated will then be delivered to an interconnection point, and then subsequently into the grid. Steam exhausted from the turbines will be condensed into liquid water and then injected back into the geothermal reservoir.

Salak-Darajat geothermal facilities have both achieved certifications, including:

- > ISO140001:2015 Environmental Management System (EMS) Certification from SGS
- > Subroto Award from the Indonesian Ministry of Energy and Mineral Resources
- > Green and Gold PROPER (Company Performance Rating Assessment Program in Environmental Management) from the Ministry of Environment and Forestry

In 2006, Darajat unit III was registered by the United Nations Framework Convention on Climate Change ("UNFCCC") as a Clean Development Mechanism ("CDM") project. The CDM (which is provided for under the Kyoto Protocol, an international agreement linked to the UNFCC which commits its parties by setting internationally binding emission reduction targets), encourages emission-reduction projects to be developed in developing countries. Such projects can earn saleable certified emission reduction credits, each equivalent to one tonne of CO<sub>2</sub>, which can be counted towards meeting Kyoto Protocol targets. A CDM project must provide emission reductions that are additional to what would otherwise have occurred and must qualify through a public registration and issuance process. Approval of the project is given by the designated national authorities granted responsibility to authorise and approve participation in CDM projects. Emission reductions from CDM projects are monitored and the monitoring results are audited every six months. Darajat unit III has requested for 4,697,905 credits, indicating that it had reduced greenhouse gas emissions by at least 4.697 million tonnes of CO<sub>2</sub> over the period 2007 to 2014.<sup>5</sup>

Renewable energy (including production, transmission, appliances and products) comprise one of the valid Green Project categories recognised by the ICMA GBP and ASEAN GBS as addressing key areas of environmental concern. Globally, the electricity and heat generation sectors are the largest emitting sectors and accounts for 25% of global greenhouse gas emissions<sup>6</sup>. According to the International Energy Agency in 2020, the global renewable electricity generation increased by 6%<sup>7</sup> and accounts and represented around 28% of global power output<sup>8</sup>. In 2019, new renewable electricity generation increased by more than the increase in electricity demand, supported by policies driven by energy security, local pollution concerns and climate benefits.<sup>9</sup> Renewable electricity generation is forecast to grow by at least 84% over 2018 to 2030, making it the fastest-growing source of electricity generation globally.<sup>10</sup>

<sup>7</sup> International Energy Agency, Tracking Power 2020.

<sup>&</sup>lt;sup>5</sup> Project 0673: Darajat Unit III Geothermal Project, Clean Development Mechanism, UNFCCC.

<sup>&</sup>lt;sup>6</sup> IPCC, 2014.

<sup>&</sup>lt;sup>8</sup> International Energy Agency, Global Energy Review 2020.

<sup>&</sup>lt;sup>9</sup> International Renewable Energy Agency, Global Renewables Outlook, 2020.

<sup>&</sup>lt;sup>10</sup> International Energy Agency, 2019.

Based on the Carbon Trust's opinion, the development of geothermal energy generation and associated infrastructure will contribute to reducing greenhouse gas emissions and help Indonesia to meet its climate and sustainability targets. It should also be noted that assets that are involved in the following operations will be ineligible under the Framework: oil and gas power, clean coal or any other fossil fuel-related technologies, nuclear and nuclear related technologies, large-scale hydropower plants as well as infrastructure that facilitates these forms of energy generation. New eligible asset categories may be added to the Framework in the future but only after prior approval by Salak-Darajat's Environmental and Social Impact Committee. This opinion relates only to the Framework as at the date of this opinion and the Bonds.

### **Principle Two: Process for Project Evaluation and Selection**

The Co-Issuers' environmental objective for issuing Green Bonds is to help facilitate the transition to less carbon intensive sources of energy. In order to select Eligible Assets that meet this criterion, the Co-Issuers have developed processes for asset and project evaluation and selection.

The Bond Co-Issuers' process for selecting eligible assets and projects is based on the policies described in its Framework. The Bond Co-Issuers will identify eligible assets and selected assets and projects will be reviewed by its Environmental and Social Impact Committee (the "Committee"). The Committee is empowered to enforce the use of proceeds requirements and restrictions as described above and as defined in the Framework. After initial project evaluation and selection by the Bond Co-Issuers, the Committee will validate the selection decision, or, by the use of its veto power, decline final selection where the selected asset or project does not comply with the requirements defined in the Framework.

Based on the Framework, the process to evaluate and select Eligible Green Assets will be aligned to the Environmental Policies of Salak and Darajat. Considerations will be given to Eligible Green Assets that can contribute towards the reduction in emissions of conventional air pollutants and greenhouse gases, improve energy efficiency and conservation, and/ or the reduction of hazardous waste. The selection criteria further exclude the selection of assets or projects associated with oil and gas power, clean coal or any other fossil fuel-related technologies, nuclear and nuclear-related technologies, large-scale hydropower plants, and infrastructure that facilitates the four earlier mentioned forms of energy generation.

In the Carbon Trust's opinion, the Bond Co-Issuers have a clear process under the Framework for project evaluation and selection that is in accordance with the ICMA GBP and ASEAN GBS. Furthermore, as described above, in our opinion the existing geothermal assets from the Bond Co-Issuers are eligible Green Projects under both the ICMA GBP and ASEAN GBS.

### **Principle Three: Management of Proceeds**

As outlined in the Framework, the proceeds from the issuance will be used to refinance Salak-Darajat geothermal assets, with the remainder being used to fund the Debt Service Account and Major Maintenance Reserve Account, and for working capital requirements of the Salak and Darajat geothermal energy generation facilities.

In the case of the inaugural transaction, the proceeds of the Green Bonds will be deposited into a secured account in Singapore that is pledged to the lenders of the Existing Senior Debt Facilities, pending repayment of these Facilities. Upon successful repayment, the remainder of the proceeds will be credited to the general funding account of the issuing entities – Star Energy Geothermal Salak, Ltd., and Star Energy Geothermal Darajat II Limited.

Pending allocation, the Framework states that the net proceeds from Green Bond issuances may be temporarily invested or otherwise maintained in cash, cash equivalents, short-term investments, or used for other general corporate purposes in relation to the Salak and Darajat geothermal energy generation facilities, and in any case, unallocated proceeds will not be allowed to be invested in carbon-intensive investments or companies that do not meet the requirements of low-carbon and climate-adaptive economies. The Bond Co-Issuers will track and monitor the allocation of the Bond proceeds as part of the Facility on an annual basis through the use of a Green Bond register.

The Carbon Trust confirms that the proposed management of proceeds is transparent and aligns with the ICMA GBP and ASEAN GBS.

#### **Principle Four: Reporting**

The Framework describes how the Bond Co-Issuers are committed to prepare a Green Bond Report on the Green Bond Issuances on an annual basis which will be made available on Star Energy Geothermal's website. This annual Green Bond Report shall include information on the financial constitution of the Green Bond including:

- > Total amount of outstanding Green Bonds
- > Examples of Eligible Green Assets financed or refinanced subject to confidentiality agreements
- > Proportion of net proceeds allocated within each Eligible Green Asset category, as well as the balance of unallocated proceeds invested in liquid marketable instruments; and
- > Proportion of net proceeds used for new financing versus refinancing.

The annual Green Bond report shall also disclose the following impact metrics:

- > Annual greenhouse gas emissions avoided, in tonnes CO<sub>2</sub>, versus baseline emission of local energy grid, "Jamali";
- > Annual hydrogen sulphide emissions into the atmosphere (tonnes H2S);
- > Installed capacity of geothermal plants in megawatt (MW); and
- > Annual renewable energy generation, in megawatt-hour (MWh)

The annual Green Bond Report will be verified by an independent external reviewer annually and made publicly available on Star Energy Geothermal's website (<a href="www.starenergygeothermal.co.id">www.starenergygeothermal.co.id</a>).

In addition to the Green Bond Report, Salak-Darajat will also, on a best effort basis, look to publish a comprehensive sustainability report that discloses various other metrics such as amount of water used, energy reduction achievement, etc on an annual basis.

In Carbon Trust's opinion, the Co-Issuers' approach to reporting is in line with the requirements of the ICMA GBP and ASEAN GBS, and provides transparency to investors.

The opinion shall be read in the context of the inherent limitations of the Procedures and this statement's intended use.

Margan lones Hoad of Assurance

Morgan Jones, Head of Assurance Carbon Trust Assurance Limited 25.09.2020

#### Carbon Trust Assurance Limited, London

#### Email: info@carbontrust.com

This second opinion statement ("Opinion") is given by Carbon Trust Assurance Limited ("CTA") and is addressed solely to the Issuer in accordance with the terms of the engagement contract between us and the Issuer. Those terms permit disclosure to other parties (whether by publication on the website of the International Capital Markets Association Green Bond Resource Centre (the "GBRC") or otherwise), solely for the purpose of enabling the Bond Issuer to show that it has obtained a second opinion as contemplated by the GBP in connection with the Bonds. We have not considered the interest of any other party in the Opinion. To the fullest extent permitted by law, we accept no responsibility and deny any liability to any other party for our work, for this statement or for the conclusions we have reached. CTA will not accept any form of liability for the substance of the Opinion and/or any liability for damage arising from the use of the Opinion and/or the information provided in it. As the Opinion is based on information made available by the Issuer, CTA does not warrant that the information presented in this Opinion is complete, accurate or up to date. Nothing contained in this Opinion shall be construed as to make a representation or warranty, express or implied, regarding the advisability of investing in any securities or any asset whose value is derived from any securities. Any person other than the Bond Issuer who obtains access to the Opinion or a copy thereof and chooses to rely on it will do so at its own risk. Furthermore, this Opinion shall in no event be interpreted and construed as an assessment of the economic performance and credit worthiness of the Issuer or the Green Bond. The issuance and the performance of the Bond Issuer and the Bond is outside the scope of this engagement. We have consented to the inclusion of the Opinion on the GBRC or in such other manner as ICMA shall from time to time use for making second opinions rendered in respect of Green Bonds available to the public. We reserve the ri

No part of the Opinion may be reproduced, transmitted or published in any form or by any means without the prior written permission of CTA.

All rights reserved.