



Second-Party Opinion

TransAlta Green Bond Framework

Evaluation Summary

Sustainalytics is of the opinion that the TransAlta Green Bond Framework is credible and impactful and aligns to the four core components of the Green Bond Principles 2021. This assessment is based on the following:



USE OF PROCEEDS The eligible categories for the use of proceeds – Renewable Energy and Energy Efficiency are aligned with those recognized by the Green Bond Principles. Sustainalytics considers that investments in the eligible categories will lead to positive environmental impacts and advance the UN Sustainable Development Goals, specifically SDG 7.



PROJECT EVALUATION / SELECTION TransAlta Corporation’s internal process of evaluating and selecting projects is overseen by its Green Bond Committee, chaired by the Treasurer and includes the Finance, Legal and Sustainability teams. TransAlta has adopted internal policies and procedures to address environmental and social risks associated with projects financed under the Framework. This is in line with market practice.



MANAGEMENT OF PROCEEDS TransAlta Corporation’s Treasury team will be responsible for the management of proceeds. TransAlta intends to reach full allocation within 24 months of each issuance. Pending full allocation, net proceeds will be temporarily invested in cash or cash equivalents or other liquid marketable investments or used to refinance existing debt that has no association with carbon-intensive sectors, in line with its financial policies. This is in line with market practice.



REPORTING TransAlta Corporation intends to report on the allocation and impact of proceeds on its website on an annual basis until full allocation. The allocation reporting will include net proceeds of outstanding green bonds, the proportion of spending by eligible project category, a list of eligible projects financed through TransAlta Corporation’s green bonds including a description of projects and allocation amount, subject to confidentiality considerations, and the remaining balance of unallocated proceeds. In addition, TransAlta is committed to reporting on relevant impact metrics. Sustainalytics views TransAlta Corporation’s allocation and impact reporting as aligned with market practice.

Evaluation Date	November 14, 2022
Issuer Location	Calgary, Canada

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Introduction

TransAlta Corporation (“TransAlta”, or the “Company”) is an electricity generator and wholesale marketer of electricity founded in 1909. The Company owns, operates, and manages assets including hydro, wind, solar, natural gas, and thermal coal in Canada, Australia and the U.S. The company is headquartered in Calgary, Canada, and has 1,282 employees.

TransAlta has developed the TransAlta Green Bond Framework (the “Framework”) under which it intends to issue green bonds and use the proceeds to finance and/or refinance, in whole or in part, existing and/or future projects expected to increase renewable energy output and improve energy efficiency at its power generation facilities. The Framework defines eligibility criteria in two areas:

1. Renewable Energy
2. Energy Efficiency

TransAlta engaged Sustainalytics to review the TransAlta Green Bond Framework, dated November 2022, and provide a Second-Party Opinion on the Framework’s environmental credentials and its alignment with the Green Bond Principles 2021 (GBP).¹ This Framework has been published in a separate document.²

Scope of work and limitations of Sustainalytics’ Second-Party Opinion

Sustainalytics’ Second-Party Opinion reflects Sustainalytics’ independent³ opinion on the alignment of the reviewed Framework with the current market standards and the extent to which the eligible project categories are credible and impactful.

As part of the Second-Party Opinion, Sustainalytics assessed the following:

- The Framework’s alignment with the Green Bond Principles 2021, as administered by ICMA;
- The credibility and anticipated positive impacts of the use of proceeds; and
- The alignment of the issuer’s sustainability strategy and performance and sustainability risk management in relation to the use of proceeds.

For the use of proceeds assessment, Sustainalytics relied on its internal taxonomy, version 1.11, which is informed by market practice and Sustainalytics’ expertise as an ESG research provider.

As part of this engagement, Sustainalytics held conversations with various members of TransAlta’s management team to understand the sustainability impact of their business processes and planned use of proceeds, as well as management of proceeds and reporting aspects of the Framework. TransAlta representatives have confirmed (1) they understand it is the sole responsibility of TransAlta to ensure that the information provided is complete, accurate or up to date; (2) that they have provided Sustainalytics with all relevant information and (3) that any provided material information has been duly disclosed in a timely manner. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics’ opinion of the Framework and should be read in conjunction with that Framework.

Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and TransAlta.

Sustainalytics’ Second-Party Opinion, while reflecting on the alignment of the Framework with market standards, is no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. Furthermore, Sustainalytics’ Second-Party Opinion addresses the anticipated impacts of eligible projects expected to be financed with bond proceeds but does not measure the actual impact. The measurement and reporting of the impact achieved through projects financed under the Framework is the responsibility of the Framework owner. Upon twenty-four (24) months following the evaluation date set stated herein, TransAlta is encouraged to update the Framework, if necessary, and seek an update to the Second-Party Opinion to ensure ongoing alignment of the Framework with market standards and expectations.

¹ The Green Bond Principles are administered by the International Capital Market Association and are available at <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>.

² The TransAlta Green Bond Framework is available on TransAlta Corporation’s website at: <https://transalta.com/investors/shareholder-information/>

³ When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics’ hallmarks is integrity, another is transparency.

In addition, the Second-Party Opinion opines on the potential allocation of proceeds but does not guarantee the realised allocation of the bond proceeds towards eligible activities.

No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument, either in favour or against, the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that TransAlta has made available to Sustainalytics for the purpose of this Second-Party Opinion.

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the TransAlta Green Bond Framework

Sustainalytics is of the opinion that the TransAlta Green Bond Framework is credible and impactful, and aligns to the four core components of the GBP. Sustainalytics highlights the following elements of TransAlta's Green Bond Framework:

- Use of Proceeds:
 - The eligible categories, Renewable Energy and Energy Efficiency, are aligned with those recognized by the GBP.
 - TransAlta has established a three-year look-back period for its refinancing activities, which Sustainalytics considers to be aligned with market practice.
 - Under the Renewable Energy category, TransAlta may invest in the following:
 - Solar or solar-plus-storage and wind and wind-plus-storage, which Sustainalytics considers to be in line with market practice.
 - The refurbishment, operation or maintenance of existing hydroelectric facilities. For facilities in operation before 2020, the following criteria applies: (i) must have a power density over 5 W/m² or (ii) operate with a lifecycle emissions intensity below 100 gCO₂e/kWh. For facilities in operation in 2020 or after, the following applies: (i) must have a power density over 10 W/m² or (ii) operate with a lifecycle emissions intensity below 50 gCO₂e/kWh. Sustainalytics also notes that the size of the dam or reservoir will not increase. Based on the above, Sustainalytics considers the criteria to be aligned with market practice.
 - Run-of-river hydroelectric power or hydro-plus-storage. Projects in operation before 2020 will meet one of the following criteria: (i) have a power density over 5 W/m² or (ii) have a lifecycle emissions intensity below 100 gCO₂e/kWh. Projects in operation in 2020 or after will meet one of the following criteria: (i) have a power density over 10 W/m² or (ii) have a lifecycle emissions intensity below 50 gCO₂e/kWh. For new facilities, TransAlta has confirmed that it will require an environmental and social impact assessment by a credible body and is also committed to ensuring that there will be no significant risks and expected negative controversies associated with projects. Sustainalytics considers this aligned with market practice.
 - Production of green hydrogen through water electrolysis powered by renewables. Sustainalytics considers this to be aligned with market practice.
 - Regarding the Energy Efficiency category, the Company may finance products and systems that reduce energy consumption or emissions including the development of large-scale, long-duration energy storage.⁴ TransAlta has confirmed to Sustainalytics that systems and equipment being financed are not powered from fossil-fuels, which Sustainalytics considers to be aligned with market expectations.
 - TransAlta has communicated to Sustainalytics that energy storage projects will include only battery and hydro storage. Sustainalytics considers these investments to be aligned with market practice.
- Project Evaluation and Selection:

⁴ TransAlta communicated to Sustainalytics that energy storage will include only hydro and battery storage technologies.

- TransAlta's Green Bond Committee, chaired by the Treasurer and includes senior members of the Finance, Legal and Sustainability teams, will be responsible for the evaluation and selection of eligible projects per the criteria defined in the Framework.
- TransAlta has adopted internal policies and procedures to address environmental and social risks associated with projects being financed. For additional details, refer to Section 2.
- Based on a well-defined project selection process and TransAlta's risk management processes, Sustainalytics considers this to be in line with market practice.
- Management of Proceeds:
 - TransAlta's Treasury team will be responsible for overseeing the allocation and tracking of proceeds to eligible projects.
 - The Company intends to allocate all proceeds within the first 24 months after the issuance.
 - Pending full allocation, net proceeds will be temporarily invested in cash or cash equivalents or other liquid marketable investments or used to pay outstanding debt in line with the Company's financial policies. TransAlta has confirmed that debt associated with carbon intensive sectors would not be refinanced under the framework.
 - Based on these elements, Sustainalytics considers this process to be aligned with market practice.
- Reporting:
 - TransAlta intends to report on the allocation and impact of proceeds on its website annually until full allocation.
 - Allocation reporting will include net proceeds of outstanding green bonds, the proportion of spending by eligible project category, a list of eligible projects financed through TransAlta's green bonds including a description of projects and allocation amount, subject to confidentiality considerations, and the remaining balance of unallocated proceeds.
 - Impact reporting is expected to be based on category-level quantitative impact metrics including (i) total installed capacity (MW), (ii) GHG emissions avoided per year (tCO₂e), (iii) total installed capacity of energy storage (MWh) and (iv) energy use reduction (GJ). For a full list of impact metrics, please refer to Appendix 1.
 - Based on the commitment to allocation and impact reporting, Sustainalytics considers this process to be in line with market practice.

Alignment with Green Bond Principles 2021

Sustainalytics has determined that the TransAlta Green Bond Framework aligns to the four core components of the GBP. For detailed information please refer to Appendix 1: Green Bond/Green Bond Programme External Review Form.

Section 2: Sustainability Performance of TransAlta

Contribution of the framework to TransAlta's sustainability performance

Sustainalytics is of the opinion that TransAlta demonstrates a commitment to sustainability through its focus on five key strategic pillars: (i) Clean, Reliable and Sustainable Electricity Production, (ii) Progressive Environmental Stewardship, (iii) Safe, Healthy, Diverse and Engaged Workplace, (iv) Positive Indigenous, Stakeholder and Customer Relationships, and (v) Technology and Innovation.⁵

In 2021, TransAlta committed to achieving a 75% reduction in its scope 1 and 2 GHG emissions by 2026 compared to a 2015 baseline. Furthermore, the Company has committed to becoming carbon neutral by 2050. As of 2021, TransAlta had reduced its scope 1 and 2 GHG emissions by 61% compared to a 2015 baseline, which indicates significant progress towards achieving its 2026 GHG emissions reduction target. In line with its GHG emissions reduction targets and to support its customers' decarbonization goals, the Company announced its Accelerated Clean Energy Growth Plan in 2021. This plan established a target for TransAlta to deliver 2GW of incremental renewable energy capacity with a targeted capital investment of USD 3 billion by 2025. By 2021, the Company had an installed renewable energy capacity of 2.8GW. TransAlta has committed to contributing to the clean energy transition and is a signatory to several industry alliances such as the Powering Past Coal Alliance, Canadian Business for Social Responsibility and the Canadian Electricity

⁵ TransAlta, "Sustainability" at: <https://www.transalta.com/sustainability/>

Association Sustainability Steering Committee.^{6,7} In addition, the Company discloses climate-related data in accordance with the recommendations of the Carbon Disclosure Project and Task Force on Climate-Related Financial Disclosures.^{8,9} Regarding water management, the Company has committed to reducing its fleet-wide water consumption by 20 million m³ by 2026, a 40% reduction compared to a 2015 baseline. Against this target, TransAlta reduced its fleet-wide water consumption by 4 million m³ in 2021, representing an achievement of 20% of its targeted reduction.¹⁰

Sustainalytics is of the opinion that the TransAlta Green Bond Framework is aligned with the company's overall sustainability strategy and initiatives and will further the Company's action on its key environmental priorities.

Approach to managing environmental and social risks associated with the projects

Sustainalytics recognizes that the net proceeds from the bonds eventually issued under the Framework will be directed towards eligible projects that are expected to have positive environmental impact. However, Sustainalytics is also aware that such eligible projects could lead to negative environmental and social outcomes. Some key environmental and social risks associated with the eligible projects could include land use and biodiversity issues associated with large-scale projects, occupational health and safety risk, human rights and supply chain issues, and potential stakeholder issues, including surrounding communities, arising from financed projects.

Sustainalytics is of the opinion that TransAlta can manage and/or mitigate potential risks through the implementation of the following:

- For overall environmental management, TransAlta has established an Environmental Management System in accordance with ISO 14001, which mainly oversees the impact and performance of GHG emissions, air emissions, energy use, land use, water use, and waste management.¹¹
- Regarding the impacts on land use and biodiversity, an environmental assessment is required for all new projects to identify potential impacts on the surrounding environment and species during construction and operation, and to determine mitigation measures. In addition, specific assessments are conducted for wildlife during the project development phase to determine the local wildlife habitats and impacts during construction and operation. Environmental Operation Management Plan is developed for each renewable energy facility, ensuring implementation of periodic inspections, monitoring, and review of the environmental performance.¹²
- For occupational health and safety, the Company developed its Total Safety Management Policy, ensuring that all assets are managed using a defined and documented Total Safety Management System ("TSMS"). The TSMS is consistent with recognized standards, laws, and regulations in environmental, health and occupational safety, process safety, and asset and risk management as well. It also identifies the functional responsibilities of employees, contractors, and third parties, and provides them with the necessary training and establishes procedures for reporting and investigating incidents and developing action plans for emergency situations.¹³
- Regarding human rights and supply chain, TransAlta formulated the Human Rights and Discrimination Policy, which demonstrates respect for human rights and prohibits discrimination, child labor, and forced labor in all workplaces, as well as among stakeholders and local communities.¹⁴ For its suppliers, the company has established the Supplier Code of Conduct, which requires suppliers to ensure their employees' and contractors' health and safety, fair and safe labor condition, compliance with environmental regulations, and ethical business practices.¹⁵
- For community relations, the Company develops a stakeholder consultation plan for each greenfield development project. TransAlta and its representatives conduct stakeholder consultations with all

⁶ The Canadian Business for Social Responsibility is an association for companies to collaborate to advance social and environmental leadership. More information can be found at: <https://cbsr.ca/>

⁷ The Canadian Electricity Association is a national forum for innovative electricity businesses in Canada. More information can be found at: <https://www.electricity.ca/>

⁸ TransAlta, "TransAlta Recognized at COP26 Powering the World Past Coal Event" at: <https://transalta.com/newsroom/news-releases/transalta-recognized-at-cop26-powering-the-world-past-coal-event/>

⁹ TransAlta, "Sustainability"

¹⁰ TransAlta, "Integrated Annual Report 2021" at: <https://transalta.com/wp-content/uploads/2022/02/TAC2021-Integrated-Report-Feb-23.pdf>

¹¹ TransAlta, "Integrated Annual Report 2021" at: <https://transalta.com/wp-content/uploads/2022/02/TAC2021-Integrated-Report-Feb-23.pdf>

¹² TransAlta, "Integrated Annual Report 2021"

¹³ TransAlta, "Total Safety Management Policy", at: https://transalta.com/wp-content/uploads/2022/01/Total-Safety-Management-Policy_Portrait_Final.pdf

¹⁴ TransAlta, "Human Rights and Discrimination Policy", at: https://transalta.com/wp-content/uploads/2022/01/TransAltas-Human-Rights-Policy_Jan-2022.pdf

¹⁵ TransAlta, "Supplier Code of Conduct", at: <https://transalta.com/wp-content/uploads/2022/05/Supplier-Code-of-Conduct-approved-2021-11-02.pdf>

potentially affected landowners, stakeholders, agencies, corporations, NGOs, environmental organizations, and indigenous peoples prior to submitting major permit applications for all projects. During the consultations, the company shares project information and holds discussions to address, resolve, and mitigate stakeholders' and indigenous communities' concerns regarding biodiversity. The company has also established an Indigenous Relations Policy, which states that it will respect and actively employ the indigenous people around its facilities and is committed to engage with them in accordance with national regulations.¹⁶

Based on these policies, standards and assessments, Sustainalytics is of the opinion that TransAlta has implemented adequate measures and is well-positioned to manage and mitigate environmental and social risks commonly associated with the eligible categories.

Section 3: Impact of Use of Proceeds

Both use of proceeds categories are aligned with those recognized by the GBP. Sustainalytics has focused on one below where the impact is specifically relevant in the local context.

Importance of renewable energy to a low-carbon future

Globally, emissions from the electricity and heat generation sectors increased by more than 900 metric tonnes, accounting for nearly 46% of global CO₂ emissions in 2021.¹⁷ As such, increasing renewable energy generation can be a key to meeting international climate goals. According to a study from the International Energy Agency and the International Renewable Energy Agency, to keep the global mean temperature below 2°C, 70% of the world's primary energy demand needs to come from low carbon energy sources by 2050.¹⁸ Between 2019 and 2020, there was a 2% increase in the share of renewable energy in electricity supply however, the global rate of renewable energy implementation needs to increase significantly to achieve international long-term goals.¹⁹

Canada is a signatory to the Paris Agreement and has committed to becoming a net-zero emission economy by 2050.²⁰ Canada currently derives 18.9% of its total primary energy supply from renewable energy sources.²¹ In line with this, the country has set a target of producing 90% of its electricity from non-emitting sources by 2030.²² Similarly, Australia has set targets for the penetration of renewables through its Renewable Energy Target scheme.²³ In 2021, the Australian renewable energy industry accounted for 32.5% of the country's total electricity generation.²⁴ In the same year, U.S government set a series of targets, including a 2030 target to reduce GHG pollution by 50-52% compared to 2005 levels in economy-wide net GHG emissions, and a goal to achieve 100% carbon-free electricity by 2035.²⁵

Given this context, Sustainalytics is of the opinion that TransAlta's financing towards renewable energy projects in Canada, Australia and the U.S. is expected to generate positive environmental impacts and enable governments to meet their international and national commitments.

¹⁶ TransAlta, "Indigenous Relations Policy", at: <https://transalta.com/wp-content/uploads/2022/02/Administrative-Policy-130-Indigenous-Relations.pdf>

¹⁷ IEA, "Global Energy Review: CO₂ Emissions in 2021", (2022), at: <https://www.iea.org/reports/global-energy-review-co2-emissions-in-2021-2>

¹⁸ International Energy Agency and International Renewable Energy Agency, "Perspectives for the Energy Transition" (2017), at: https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2017/Mar/Perspectives_for_the_Energy_Transition_2017.pdf

¹⁹ IEA, "Global Energy Review 2020", at: <https://www.iea.org/reports/global-energy-review-2020/electricity>

²⁰ Government of Canada, "Net-Zero Emissions by 2050", at: <https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/net-zero-emissions-2050.html>

²¹ Government of Canada, "Renewable Energy", at: <https://www.nrcan.gc.ca/our-natural-resources/energy-sources-distribution/renewable-energy/about-renewable-energy/7295>

²² Government of Canada, "Powering our future with clean electricity", at:

<https://www.canada.ca/en/services/environment/weather/climatechange/climate-action/powering-future-clean-energy.html>

²³ Australian Government, "Achieving the Target", (2019), at: <http://www.cleanenergyregulator.gov.au/RET/About-the-Renewable-Energy-Target/Achieving-the-target>

²⁴ Clean Energy Council, "Clean Energy Australia Report", at: <https://www.cleanenergycouncil.org.au/resources/resources-hub/clean-energy-australia-report>

²⁵ The White House, "Fact Sheet: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Jobs and Securing U.S. Leadership on Clean Energy Technologies", (2021), at: <https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/>

Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 by the United Nations General Assembly and form an agenda for achieving sustainable development by the year 2030. The bond(s) issued under the TransAlta Green Bond Framework advances the following SDGs and targets:

Use of Proceeds Category	SDG	SDG target
Renewable Energy	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
Energy Efficiency	7. Affordable and Clean Energy	7.3 By 2030, double the global rate of improvement in energy efficiency

Conclusion

TransAlta has developed the TransAlta Green Bond Framework under which it may issue green bonds, and use the proceeds to finance and refinance renewable energy and energy efficiency projects expected to deliver positive environmental impacts.

The TransAlta Green Bond Framework outlines a process for tracking, allocation and managing proceeds and makes commitments for TransAlta to report on the allocation and impact of the use of proceeds. Furthermore, Sustainalytics believes that the TransAlta Green Bond Framework is aligned with the Company's sustainability strategy and that investments in the eligible categories are expected to advance the UN Sustainable Development Goal 7. Additionally, Sustainalytics is of the opinion that TransAlta has adequate measures to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects funded by the proceeds.

Based on the above, Sustainalytics is confident that TransAlta is well-positioned to issue green bonds and that the TransAlta Green Bond Framework is robust, transparent, and is aligned with the four core components of the Green Bond Principles 2021.

Appendix

Appendix 1: Green Bond / Green Bond Programme - External Review Form

Section 1. Basic Information

Issuer name:	TransAlta Corporation
Green Bond ISIN or Issuer Green Bond Framework Name, if applicable:	TransAlta Green Bond Framework
Review provider's name:	Sustainalytics
Completion date of this form:	November 14, 2022
Publication date of review publication:	

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 GBP:

- | | |
|--|--|
| <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 REVIEW PROVIDER

- | | |
|---|--|
| <input checked="" type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

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*)

Please refer to Evaluation Summary above.

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*):

The eligible categories for the use of proceeds – Renewable Energy and Energy Efficiency are aligned with those recognized by the Green Bond Principles. Sustainalytics considers that investments in the eligible categories will lead to positive environmental impacts and advance the UN Sustainable Development Goals, specifically SDG 7.

Use of proceeds categories as per GBP:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Renewable energy | <input checked="" 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 GBP | <input type="checkbox"/> Other (<i>please specify</i>): |

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

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (*if applicable*):

TransAlta's internal process of evaluating and selecting projects is overseen by its Green Bond Committee, chaired by the Treasurer and includes the Finance, Legal and Sustainability teams. TransAlta has adopted internal policies and procedures to address environmental and social risks associated with projects financed under the Framework. This is in line with market practice.

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 (<i>please specify</i>): |

Information on Responsibilities and Accountability

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

3. MANAGEMENT OF PROCEEDS

Overall comment on section (*if applicable*):

TransAlta's Treasury team will be responsible for the management of proceeds. TransAlta intends to reach full allocation within 24 months of each issuance. Pending full allocation, net proceeds will be temporarily invested in cash or cash equivalents or other liquid marketable investments or used to refinance existing debt that has no association with carbon-intensive sectors, in line with its financial policies. This is in line with market practice.

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 (<i>please specify</i>): |

Additional disclosure:

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

4. REPORTING

Overall comment on section (*if applicable*):

TransAlta intends to report on the allocation and impact of proceeds on its website on an annual basis until full allocation. The allocation reporting will include net proceeds of outstanding green bonds, the proportion of spending by eligible project category, a list of eligible projects financed through TransAlta's green bonds including a description of projects and allocation amount, subject to confidentiality considerations, and the

remaining balance of unallocated proceeds. In addition, TransAlta is committed to reporting on relevant impact metrics. Sustainalytics views TransAlta's allocation and impact reporting as aligned with market practice.

Use of proceeds reporting:

- Project-by-project
 On a project portfolio basis
- Linkage to individual bond(s)
 Other (*please specify*):

Information reported:

- Allocated amounts
 Green Bond financed share of total investment
- Other (*please specify*): The proportion of spending by eligible project category as defined in the Use of Proceeds section; a list of eligible projects financed through TransAlta's green bonds, including description of projects; Remaining balance of unallocated proceeds

Frequency:

- Annual
 Semi-annual
- Other (*please specify*):

Impact reporting:

- Project-by-project
 On a project portfolio basis
- Linkage to individual bond(s)
 Other (*please specify*):

Information reported (expected or ex-post):

- GHG Emissions / Savings
 Energy Savings
- Decrease in water use
 Other ESG indicators (*please specify*): Total installed capacity (MW), Total installed capacity of energy storage (MWh)

Frequency

- Annual
 Semi-annual
- Other (*please specify*):

Means of Disclosure

- | | |
|---|--|
| <input type="checkbox"/> Information published in financial report | <input type="checkbox"/> Information published in sustainability report |
| <input type="checkbox"/> Information published in ad hoc documents | <input checked="" type="checkbox"/> Other (please specify): on TransAlta's website (https://www.transalta.com/) |
| <input type="checkbox"/> Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review): | |

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.)

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE**Type(s) of Review provided:**

- | | |
|--|--|
| <input type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification / Audit | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

Review provider(s):**Date of publication:****ABOUT ROLE(S) OF INDEPENDENT REVIEW PROVIDERS AS DEFINED BY THE GBP**

- i. **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.
- ii. **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.
- iii. **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.
- iv. **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.

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