

Second-Party Opinion Canadian Solar Green Financing Framework



Evaluation Summary

Sustainalytics is of the opinion that the Canadian Solar Green Financing Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2021 and the Green Loan Principles 2023. This assessment is based on the following:



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



PROJECT EVALUATION AND SELECTION Each of Canadian Solar's two business segments, CSI Solar and Recurrent Energy, follows a distinct project evaluation and selection process. At CSI Solar, a working group of experts selects eligible projects identified by regional teams, with the final approval provided by the Board of Directors. At Recurrent Energy, the Risk and Investment Management Department and the Investment Committee jointly select the projects based on recommendations from regional teams. Canadian Solar has a dedicated environmental and social risk management process that is applicable to all allocation decisions made under the Framework. Sustainalytics considers this to be aligned with market practice.



MANAGEMENT OF PROCEEDS Canadian Solar's Project and Structure Finance Department will be responsible for the allocation of net proceeds. The Finance and Asset Management departments will oversee the process of managing proceeds. Canadian Solar intends to fully allocate the net proceeds raised within 36 months of the date of each issuance. Pending allocation, unallocated proceeds will be held or invested in cash or cash equivalents, including money market instruments, bank accounts or other liquid financial instruments according to its investment management policy. Sustainalytics considers this process to be adequate and aligned with market practice.



REPORTING Canadian Solar commits to report on the allocation of proceeds to its investors on an annual basis until full allocation, or in the case of revolving credit facilities, until the maturity of the loans. Allocation reporting is expected to include project-wide details on the allocation of net proceeds, the balance of unallocated net proceeds and the share of proceeds used for financing and refinancing. In addition, Canadian Solar is committed to reporting on relevant impact metrics wherever feasible. Sustainalytics views Canadian Solar's allocation and impact reporting as aligned with market practice.

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¹ This document is an update to a second-party opinion provided by Sustainalytics in September 2021 and updated in December 2022.

Introduction

Canadian Solar Inc. (“Canadian Solar” or the “Company”) is a solar module manufacturer and utility-scale solar developer headquartered in Guelph, Canada, with operations in more than 30 countries.² Since its establishment in 2001, the Company’s solar photovoltaic (PV) modules have generated a cumulative 94 GW of renewable energy power.³ The Company had more than 22,000 employees as of December 2023 and reported revenue of USD 7.6 billion in 2023.^{4,5} The Company has subsidiaries in the United States, Canada, the United Kingdom, Japan, Hong Kong, the Netherlands, Singapore, Brazil, Australia, Argentina, China, Thailand, Vietnam and Germany.⁶

Canadian Solar has developed the Canadian Solar Green Financing Framework dated April 2024 (the “Framework”) under which it and its subsidiaries⁷ intend to issue green bonds, loans, private placements,⁸ commercial papers and other financial instruments⁹ and use the proceeds to finance or refinance, in whole or in part, existing or future projects that renewable energy generation and energy storage projects (the “Eligible Green Projects”) that are expected to create positive environmental impact. The Framework defines eligibility criteria in one area:

1. Renewable Energy

Canadian Solar engaged Sustainalytics to review the Framework and provide a Second-Party Opinion on the Framework’s environmental credentials and its alignment with the Green Bond Principles 2021 (GBP)¹⁰ and the Green Loan Principles 2023 (GLP).¹¹ The Framework has been published in a separate document.¹²

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

Sustainalytics’ Second-Party Opinion reflects Sustainalytics’ independent¹³ opinion on the alignment of the reviewed Framework with 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, and the Green Loan Principles 2023, as administered by LMA, APLMA and LSTA;
- 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 1.16, 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 Canadian Solar’s management team to understand the sustainability impact of its business processes and planned use of proceeds, as well as the management of proceeds and reporting aspects of the Framework. Canadian Solar

² Canadian Solar, “Our History”, at: <https://www.canadiansolar.com/aboutus/#rwjs>

³ Canadian Solar, “2022 ESG Sustainability Report”, (2022), at: https://www.canadiansolar.com/canadian-solar_esg-report/wp-content/uploads/2023/08/Canadian-Solar-2022-ESG-Report-vFinal.pdf

⁴ Canadian Solar, “Our History”, at: <https://www.canadiansolar.com/aboutus/#rwjs>

⁵ Canadian Solar, “Investor Relations”, at: <https://investors.canadiansolar.com/news-releases/news-release-details/canadian-solar-reports-fourth-quarter-and-full-year-2023-results>

⁶ US Securities and Exchange Commission, “Form 20-F”, at: <https://investors.canadiansolar.com/static-files/808673f4-c99f-4345-a011-43ce03e0ffc4>

⁷ Canadian Solar has communicated that it owns or controls (more than 50% of shares) the subsidiaries issuing instruments under the Framework. The Company has further confirmed that it will be responsible for ensuring continual alignment of any issuances with the criteria defined in the Framework.

⁸ Canadian Solar has confirmed that private placements are limited to debt instruments.

⁹ Sustainalytics has not reviewed the financial instruments that are not specified in the Framework.

¹⁰ 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/>

¹¹ The Green Loan Principles are administered by the Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications and Trading Association and are available at <https://www.lsta.org/content/green-loan-principles/>

¹² The Canadian Solar Green Financing Framework is available at: <https://www.canadiansolar.com/wp-content/uploads/2023/01/Canadian-Solar-Green-Bond-Framework.pdf>

¹³ 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

representatives have confirmed that: (1) they understand it is the sole responsibility of Canadian Solar to ensure that the information provided is complete, accurate and 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 Canadian Solar.

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 and loan 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.

In addition, the Second-Party Opinion opines on the potential allocation of proceeds but does not guarantee the realised allocation of the bond and loan 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 Canadian Solar has made available to Sustainalytics for the purpose of this Second-Party Opinion.

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the Canadian Solar Green Financing Framework

Sustainalytics is of the opinion that the Canadian Solar Green Financing Framework is credible, impactful and aligned with the four core components of the GBP and GLP. Sustainalytics highlights the following elements of the Framework:

- Use of Proceeds:
 - The eligible category, Renewable Energy, is aligned with those recognized by the GBP and GLP.
 - Canadian Solar has established a three-year look-back period for the refinancing of operating expenditures. Sustainalytics considers this to be in line with market expectations.
 - Under the Renewable Energy category, Canadian Solar may finance:
 - The acquisition, construction, operation and maintenance of electricity generation facilities that produce electricity from PV solar power.
 - Investments in the acquisition, construction, operation and maintenance of manufacturing facilities and equipment for the production of renewable energy technology components and equipment, including PV silicon, ingot, wafer, cells and modules. Canadian Solar has confirmed to Sustainalytics that such assets will be wholly dedicated to the manufacture of components for renewables.
 - Investments in the acquisition, development, construction, operation and maintenance of energy storage facilities, and other energy solutions such as hybrid solutions of solar PV with wind and other renewables. Canadian Solar has confirmed that energy storage investments will entail electrochemical batteries that can either be co-located with solar PV or standalone. Sustainalytics notes that Canadian Solar intends to finance investments in standalone energy storage systems in multiple regions, with most of these investments envisaged to be located in the US and Canada. Sustainalytics recognizes the critical need to expand utility-scale storage systems in order to enable the expansion of renewable energy, while also noting that the environmental benefit of storage systems depends on the carbon intensity of the grid to which they are

connected, and that deploying such assets to carbon-intensive grids or associated systems may result in increased emissions. Sustainalytics encourages Canadian Solar to prioritize the installation of storage systems on grids that follow a credible decarbonization pathway¹⁴ and to report on the positive impact of such installations, where feasible.

- Sustainalytics notes that Canadian Solar excludes the financing of projects associated with: i) the acquisition or generation of electricity based on fossil fuel or coal and oil heating systems; ii) activities involving exploitation of human rights, modern slavery (e.g. forced labour or human trafficking) or child labour; iii) production or sale of any product or activity that may relate to importers and exporters with misconduct, such as illegal natural extraction; and iv) any other activity that the Company determines to be ineligible for allocation of proceeds at the time of allocation.
- Project Evaluation and Selection:
 - The Company follows a dual approach to project selection and evaluation, with a distinct process for each of Canadian Solar's two business segments - CSI Solar and Recurrent Energy. At CSI Solar, a working group comprising senior executives and subject matter experts from various departments such as Business Development, Finance, Legal, EHS and Engineering & Technology, selects the projects to be considered for financing under the Framework from a list of potential investments identified by regional teams. CSI Solar's Board of Directors provides the final approval of eligible projects in accordance with the eligibility criteria under the Framework. At Recurrent Energy, the Risk and Investment Management Department and the Investment Committee consisting of senior executives jointly select the projects to be financed based on recommendations from regional teams according to the eligibility criteria under the Framework.
 - Canadian Solar has adopted a broad Environmental and Social Management and Monitoring (ESMM) plan to evaluate environmental and social risks, which applies to all allocation decisions made under the Framework. Sustainalytics considers this risk assessment and mitigation process to be adequate. For additional details, see Section 2.
 - Based on the clear delineation of responsibility, Sustainalytics considers this process to be in line with market practice.
- Management of Proceeds:
 - Canadian Solar's Project and Structured Finance Department will be responsible for the allocation of net proceeds and ensuring compliance with all relevant financial, legal and governance obligations of the Company. The Company's Finance and Asset Management departments will oversee the management of net proceeds.
 - The Company intends to achieve full allocation of an amount equal to the net proceeds within 36 months of the date of each issuance. Unallocated proceeds may be held or invested in cash or cash equivalents, including money market instruments, bank accounts or any other liquid financial instruments according to the Company's investment management policy.
 - Canadian Solar has communicated to Sustainalytics that instruments issued under the Framework may include multi-tranche loan facilities. The Company intends to label only those tranches of such facilities whose proceeds will be allocated according to the eligibility criteria in the Framework.
 - Based on the management of proceeds and the disclosure of the temporary use of unallocated proceeds, Sustainalytics considers this process to be in line with market practice.
- Reporting:
 - Canadian Solar commits to report on allocation of proceeds and, where feasible, the impact of financed Eligible Green Projects to investors on an annual basis until full allocation.
 - For revolving credit facilities, Canadian Solar has confirmed that it will report until maturity of the loans.
 - The Company's allocation reporting is expected to include project-wide details on the allocation of net proceeds, the balance of unallocated net proceeds and the share of proceeds used for

¹⁴ Sustainalytics considers a transmission and distribution grid to be aligned with a credible decarbonization pathway if it meets either of the following criteria: i) more than 67% of newly enabled generation installed capacity in the system is below the emissions threshold of 100 gCO_{2e}/kWh, measured on a life cycle basis in accordance with electricity generation criteria over a rolling five-year period; or ii) the average system grid emissions factor is below the threshold of 100 gCO_{2e}/kWh over a rolling five-year period.

financing and refinancing. Additionally, impact reporting is expected to provide the project-level impact of the investment information against the respective key performance indicators, including: i) total capacity of renewable energy production (measured in MW); ii) annual renewable energy generation (measured in MWh); and iii) estimated CO₂ emissions avoided (measured in tCO₂e).

- Based on the Company's commitment to allocation and impact reporting where feasible, Sustainalytics considers this process to be in line with market practice.

Alignment with the Green Bond Principles 2021 and Green Loan Principles 2023

Sustainalytics has determined that the Canadian Solar Green Financing Framework aligns with the four core components of the GBP and GLP.

Section 2: Sustainability Strategy of Canadian Solar

Contribution to Canadian Solar's sustainability strategy

Canadian Solar focuses on the following environmental areas in its sustainability strategy: i) GHG emissions; ii) energy intensity in manufacturing; iii) water use in manufacturing; and iv) manufacturing waste.¹⁵

Canadian Solar has set the following five-year (2022-2027) targets, which it intends to update on a rolling basis:

- GHG emissions – Canadian Solar has committed to achieving a 28% reduction (a decrease of 34 tCO₂e/MWp) in its GHG emissions intensity by 2027 compared to 2022. The Company intends to achieve this target by procuring more renewable energy in its operations and powering its operations with 100% renewable energy by 2030, among other initiatives. The Company reported a 20% reduction in its GHG emissions intensity between 2017 and 2022.¹⁶
- Energy intensity in manufacturing – Canadian Solar has committed to reducing energy intensity by 29% (a decrease of 50 MWh/MW) by 2027 compared to 2022. The Company aims to achieve this target by adopting more energy efficient processes for wafer, module and cell manufacturing. Between 2017 and 2022, the energy intensity of the Company's manufacturing operations decreased by 25%.¹⁷
- Water use in manufacturing – Canadian Solar has committed to reducing its water use intensity by 26% (a decrease of 196 t/MW) by 2027 from a 2022 baseline. To achieve this target, the Company has adopted water conservation and recycling measures using a strategic approach to selecting locations for certain projects with the aim of reducing water withdrawals from high baseline water stress locations. The Company reported a 67% reduction in water use intensity for its manufacturing operations between 2017 and 2022.¹⁸
- Manufacturing waste – Canadian Solar has committed to achieving a 23% reduction in waste intensity (a decrease of 2.1 t/MW) by 2027 from a 2022 baseline. The Company intends to achieve this target through partnership-based recycling and waste reduction programmes. The Company reduced its manufacturing waste intensity by 45% between 2017 and 2022.¹⁹

Sustainalytics is of the opinion that the Canadian Solar Green Financing 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 proceeds from the instruments issued under the Framework will be directed towards eligible projects that are expected to have positive environmental or social impacts. However, Sustainalytics is aware that such eligible projects could also lead to negative environmental and social outcomes. Some key environmental and social risks possibly associated with the eligible projects may include issues related to project development and construction, land use and biodiversity, stakeholder participation,

¹⁵ Canadian Solar, "2022 ESG Sustainability Report", (2022), at: https://www.canadiansolar.com/canadian-solar_esg-report//wp-content/uploads/2023/08/Canadian-Solar-2022-ESG-Report-vFinal.pdf

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Ibid.

occupational health and safety, water management and waste generated during manufacturing processes, and labour issues related to supply chain.

Sustainalytics is of the opinion that Canadian Solar is able to manage and/or mitigate potential risks through implementation of the following:

- Canadian Solar has developed an ESMM plan for applicable regions to address the environmental and social risks associated with the financed projects, including issues related to land use and associated ecological impacts, stakeholder management and environmental health and safety.²⁰
- The Company has an Environment, Occupational Health and Safety Policy that outlines the Company's commitments to protecting the environment and providing a healthy and safe workplace for employees, contractors and customers in any region in which Canadian Solar conducts its business.²¹
- Projects based in the EU must comply with the EU's Environmental Impact Assessment Directive,²² which requires projects that are likely to have a significant impact on the environment are adequately assessed before approval.²³ With respect to biodiversity considerations under the directive, measures must avoid any deterioration in environmental quality and a net loss of biodiversity.²⁴ Concerning land use, the EIA Directive notes that the EIA must identify, describe and assess impacts related to land use.²⁵
- In China, the Environmental Impact Assessment Act requires all projects related to construction, reconstruction, expansion or refurbishing to undergo an environmental risk assessment during the initial phase of project design and feasibility analysis.²⁶ The act stipulates that the assessment must include the identification of key risk factors related to environment and human health.²⁷ According to Chinese law, all companies are required to undergo an assessment by an independent and certified environmental impact assessment agency to avoid any conflicts of interest, including the interest of local communities.²⁸
- To manage occupational health and safety-related risks, the Company has adopted an Occupational Health and Safety (OH&S) Policy^{29,30} and follows ISO 45001,³¹ which guide its operational strategy.³² Furthermore, EU-based projects are expected to comply with the EU Directive on Worker Health and Safety, which requires employers to ensure the health and safety of workers by preventing occupational risks and providing information and training.³³ The Company requires its key suppliers and contractors to manage OH&S-related risks by having them sign a Supplier's EHS Agreement before commencing deliveries and services.³⁴
- Given that the manufacturing of solar components is a water-intensive process, the Company has adopted a water risk management strategy that includes water recycling conservation measures aimed at optimizing water use in the manufacturing process.³⁵ Additionally, Canadian Solar has

²⁰ Canadian Solar, "2020 ESG Sustainability Report", (2020), at: https://csisolarweb.s3.ap-east-1.amazonaws.com/wp-content/uploads/2020/01/29180824/ESG-Report_July28e.pdf

²¹ Canadian Solar, "Canadian Solar Environment, Occupational Health and Safety Policy", at: <https://investors.canadiansolar.com/static-files/2c79f247-ad03-48aa-918b-d430b9385b42>

²² European Commission, "Directive 2014/52/EU on the assessment of the effects of certain public and private projects on the environment", (2014), at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0052>

²³ Ibid.

²⁴ Ibid.

²⁵ Ibid.

²⁶ Government of China, "Environmental Impact Assessment Law of the People's Republic of China", (2016) at: <https://www.waizi.org.cn/law/11686.html>

²⁷ Ibid.

²⁸ Ibid.

²⁹ Canadian Solar, "Canadian Solar Environment, Occupational Health and Safety Policy", at: <https://static.csisolar.com/wp-content/uploads/2020/01/28090633/Canadian-Solar-EHS-Policy.pdf>

³⁰ Canadian Solar, "2021 ESG Sustainability Report", (2021), at: https://www.canadiansolar.com/wp-content/uploads/2022/07/Canadian-Solar_2021-ESG-Report_Final.pdf

³¹ ISO, "ISO 45000 Family – Occupational Health and Safety", at: <https://www.iso.org/iso-45001-occupational-health-and-safety.html>

³² Canadian Solar, "2021 ESG Sustainability Report", (2021), at: https://www.canadiansolar.com/wp-content/uploads/2022/07/Canadian-Solar_2021-ESG-Report_Final.pdf

³³ European Commission, "Directive 89/391/EEC on the introduction of measures to encourage improvements in the safety and health of workers at work", (1989), at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31989L0391&from=FR>

³⁴ Canadian Solar, "2022 ESG Sustainability Report", (2022), at: https://www.canadiansolar.com/canadian-solar_esg-report/wp-content/uploads/2023/08/Canadian-Solar-2022-ESG-Report-vFinal.pdf

³⁵ Ibid.

relocated manufacturing operations to lower baseline water stress (BWS)³⁶ areas as a part of the strategy to move manufacturing from regions with high to moderate or lower baseline water stress.³⁷

- For waste management, Canadian Solar complies with the EU's REACH Regulation, the RoHS Directive, US Environmental Protection Agency standards and other regulations for managing chemical waste and electronic waste across the Company's product lines and for all manufactured solar PV modules.³⁸
- Sustainalytics notes that financing may take place in countries that have been identified as high-risk regions, acknowledging the potential impact of planned investments in these regions especially. Sustainalytics notes that thorough risk management procedures should accompany such investments so that any adverse effects are identified and addressed. To address human rights risks associated with investments, Canadian Solar has in place a Labour and Human Rights Policy and an Anti-Modern Slavery Policy.^{39,40} Additionally, Canadian Solar joined the United Nations Global Compact (UNGC) in 2023 and committed to comply with the UNGC principles on human rights, labour, environment and anti-corruption.⁴¹
- Sustainalytics has identified a specific allegation relating to forced labour surrounding some suppliers of Canadian Solar in China's Xinjiang region.^{42,43,44,45} Additionally, Sustainalytics notes that based on some reports, the modules produced by Canadian Solar in China, Thailand and Vietnam have a high risk of exposure to forced labour in Xinjiang due to incomplete information regarding the origin of raw materials.⁴⁶ To address these risks, Canadian Solar has committed to investigating the allegations and reporting the results,⁴⁷ and has communicated to Sustainalytics that it manages such supply chain risks by prioritizing the responsible procurement of materials across the entire value chain of its business. In 2022, the Company committed to adopting a third-party audit procedure to have all its operations comply with international standards, such as the UN Guiding Principles on Business and Human Rights, the ILO Declaration on Fundamental Principles and Rights at Work and the ILO Forced Labour Convention.⁴⁸ Furthermore, the Company uses its Supplier Code of Conduct, Anti-Modern Slavery and Labor and Human Rights policies to monitor its supply chain, and enforces them by carrying out audits and third-party assessments.^{49,50,51}

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

³⁶ World Resources Institute (WRI), Aqueduct Water Risk Atlas, at: https://www.wri.org/applications/aqueduct/water-risk-atlas/#/?advanced=false&basemap=hydro&indicator=w_awr_def_tot_cat&lat=30&lng=-80&mapMode=view&month=1&opacity=0.5&ponderation=DEF&predefined=false&projection=absolute&scenario=optimistic&scope=baseline&threshold&timeScale=annual&year=baseline&zoom=3

³⁷ Canadian Solar, "2022 ESG Sustainability Report", (2022), at: https://www.canadiansolar.com/canadian-solar_esg-report//wp-content/uploads/2023/08/Canadian-Solar-2022-ESG-Report-vFinal.pdf

³⁸ Ibid.

³⁹ Canadian Solar, "Labor and Human Rights Policy", at: <https://static.csisolar.com/wp-content/uploads/2020/01/28090827/Labor-and-Human-Rights-Policy.pdf>

⁴⁰ Canadian Solar, "Anti-Modern Slavery Policy", at: <https://investors.canadiansolar.com/static-files/9933a290-df48-45ef-9738-c31154bf96d8>

⁴¹ Canadian Solar, "2022 ESG Sustainability Report", (2022), at: https://www.canadiansolar.com/canadian-solar_esg-report//wp-content/uploads/2023/08/Canadian-Solar-2022-ESG-Report-vFinal.pdf

⁴² Whalen, J. (2021), "U.S. begins detaining solar panel imports over concerns about forced labor in China", The Washington Post, at: <https://www.washingtonpost.com/business/2021/08/27/customs-detains-chinese-solar-panels/>

⁴³ The Dallas Morning News, "Texas wants solar energy but forced labor in China is a concern", (2024), at:

<https://www.dallasnews.com/opinion/commentary/2024/01/12/texas-wants-solar-energy-but-forced-labor-in-china-is-a-concern/>

⁴⁴ The Maine Wire, "Maine Solar Power Project Linked to Chinese Forced Labor", (2023), at: <https://www.themainewire.com/2023/01/maine-augusta-solar-salve-labor-xinjiang-china-janet-mills-green-energy/>

⁴⁵ Canadian Solar, "Notice of Exempt Solicitation (Voluntary Submission)", (2022), at: <https://investors.canadiansolar.com/static-files/916becde-db76-4c6e-a7c0-5a42392b5a57>

⁴⁶ Crawford, A. and Murphy, L. T., "'Over-Exposed: Uyghur Region Exposure Assessment for Solar Industry Sourcing", (2023), at: <https://www.shu.ac.uk/helena-kennedy-centre-international-justice/research-and-projects/all-projects/over-exposed>

⁴⁷ The Globe and Mail, "Canadian Solar vows probe into allegations it used forced labour in Xinjiang plant", at: <https://www.theglobeandmail.com/business/article-canadian-solar-promises-belated-investigation-into-xinjiang-plant/>

⁴⁸ Canadian Solar, "Canadian Solar 2022 ESG Report", (2022), at: https://static.csisolar.com/wp-content/uploads/2023/10/19160623/Canadian-Solar-2022-ESG-Report.Final_10.19.pdf

⁴⁹ Canadian Solar, "Supplier Code of Conduct", at: <http://investors.canadiansolar.com/static-files/ae1534e7-8b4a-4dce-833d-b7a12c5041bb>

⁵⁰ Canadian Solar, "Anti-Modern Slavery Policy", at: <http://investors.canadiansolar.com/static-files/9933a290-df48-45ef-9738-c31154bf96d8>

⁵¹ Canadian Solar, "Labor and Human Rights Policy", at: <https://static.csisolar.com/wp-content/uploads/2020/01/28090827/Labor-and-Human-Rights-Policy.pdf>

Section 3: Impact of Use of Proceeds

The use of proceeds category is aligned with those recognized by the GBP and GLP. Sustainalytics has focused below on where the impact is specifically relevant in the local context in EMEA and the Americas, acknowledging that the Company's business also extends to Asia and the Pacific.

Importance of financing renewable energy projects in EMEA and the Americas

The IEA estimates that in 2021 more than three-quarters of total GHG emissions globally were energy related, with fossil fuels representing 80% of the total energy supply globally.⁵² Specifically in relation to electricity, global electricity demand was 23,230 TWh in 2020 after a 2.3% annual growth over the preceding decade.⁵³ To achieve the 1.5°C limit to global warming called for in the Paris Agreement, total GHG emissions need to be reduced by 45% by 2030 compared to 2010 and reach net zero by 2050, with electricity generation globally reaching net zero and renewables supplying almost half of total energy consumption by 2040.^{54,55} Demand for fossil fuels remained strong in past years, however, in 2023 investment in clean energy has increased by 40% since 2020, indicating an increase in the deployment of alternatives.⁵⁶

In the EU, the energy sector is the most significant contributor of GHG emissions, accounting for approximately 75% of the region's total emissions.⁵⁷ The EU has set a target to increase the proportion of renewable energy in the region's overall energy mix to 40% by 2030.⁵⁸ Spain and Italy together represent almost 20% of the EU's total GHG emissions.^{59,60} In line with the EU's target, Spain has launched the Integrated National Energy and Climate Plan, which aims to achieve a 42% share of renewable energy in the country's final energy demand and 74% electricity generation from renewables by 2030.⁶¹ Similarly, Italy has committed to increasing the share of renewable energy in its energy mix and achieve 42% share of renewable energy in the country's final energy consumption by 2030.⁶² Moreover, the Italian government aims to generate approximately 55% of its electricity from renewable energy sources by 2030, primarily from solar and wind power.^{63,64} Other countries in the broader EMEA region have similar targets. For example, South Africa has set a target of achieving 41% of renewable energy in its energy mix by 2030,⁶⁵ with the ambition to become climate neutral by 2050. Along with the South African example, another 53 African countries have submitted their Intended Nationally Determined Contributions (INDCs).⁶⁶

In Canada, approximately 80% of the country's GHG emissions came from the production and consumption of energy, since Canada's overall energy supply still relies heavily on fossil fuels.⁶⁷ The electricity sector accounted for 7.7% of the country's total GHG emissions in 2021, making the sector the sixth largest contributor to total emissions.⁶⁸ Canada has set a target to source 90% of its electricity from non-emitting

⁵² IEA, "Greenhouse Gas Emissions from Energy Data Explorer", (2023), at: <https://www.iea.org/data-and-statistics/data-tools/greenhouse-gas-emissions-from-energy-data-explorer>

⁵³ IEA, "Net Zero by 2050: A Roadmap for the Global Energy Sector", (2021), at: https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroBy2050-ARoadmapfortheGlobalEnergySector_CORR.pdf

⁵⁴ Ibid.

⁵⁵ United Nations, "For a livable climate: Net-zero commitments must be backed by credible action", at: <https://www.un.org/en/climatechange/net-zero-coalition#:~:text=To%20keep%20global%20warming%20to,reach%20net%20zero%20by%202050>

⁵⁶ IEA, "World Energy Outlook 2023", (2023), at: <https://iea.blob.core.windows.net/assets/86ede39e-4436-42d7-ba2a-edf61467e070/WorldEnergyOutlook2023.pdf>

⁵⁷ European Commission, "Questions and Answers – Making our energy system fit for our climate targets", (2021), at: https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_3544

⁵⁸ European Commission, "Stepping up Europe's 2030 climate ambition", (2020), at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0562>

⁵⁹ European Parliament, "Climate action in Spain", at: [https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/690579/EPRS_BRI\(2021\)690579_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/690579/EPRS_BRI(2021)690579_EN.pdf)

⁶⁰ European Parliament, "Climate action in Italy", at: [https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/690663/EPRS_BRI\(2021\)690663_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/690663/EPRS_BRI(2021)690663_EN.pdf)

⁶¹ European Commission, "Integrated National Energy and Climate Plan 2021-2030", (2020), at: https://energy.ec.europa.eu/system/files/2020-06/es_final_necp_main_en_0.pdf

⁶² European Commission, "Integrated National Energy and Climate Plan - Italy", at: https://energy.ec.europa.eu/system/files/2020-02/it_final_necp_main_en_0.pdf

⁶³ IEA, "Italy", (2021), at: <https://www.iea.org/countries/italy>

⁶⁴ Ibid.

⁶⁵ Owusu-Mante, S. (2020), "South Africa's 2019 IRP Renewable Energy Targets", Climate Policy Lab, at: <https://www.climatepolicylab.org/communityvoices/2020/5/13/south-africas-2019-irp-renewable-energy-targets>

⁶⁶ UNECA, Nationally Determined Contributions (NDCs), at: <https://www.uneca.org/african-climate-policy-centre/nationally-determined-contributions-%28ndcs%29>

⁶⁷ Canada Energy Regulator, "Canada's Energy Future", (2023), at: <https://www.cer-rec.gc.ca/en/data-analysis/canada-energy-future/2023/results/>

⁶⁸ Government of Canada, "Greenhouse gas emissions", (2023), at: <https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/greenhouse-gas-emissions.html#electricity>

sources by 2030.⁶⁹ In 2021, the federal government announced a CAD 964 million (USD 721 million) investment in a renewable energy programme to increase the number of smart renewable energy and grid modernization projects to promote the use of clean energy sources, such as wind, solar and hydro.⁷⁰ In the US, the energy sector accounted for 73% of the country’s total emissions, with the electricity sector being responsible for 25% of the country’s total GHG emissions in 2020.^{71,72} The US government has set a target to reduce GHG emissions by 50-52% in comparison to 2005 and aims to generate 100% of its electricity from renewable sources by 2035.⁷³ From 2005 to 2022, the US reduced coal’s contribution in electricity generation from 50% to 19%, increased the natural gas’ contribution from 19% to 39% and increased non-hydro renewable energy contribution from 2% to 17%.⁷⁴

In Latin America and the Caribbean, Argentina, Brazil, Mexico and Venezuela together emitted 70% of the region’s total GHG emissions.⁷⁵ In Brazil, the top GHG emitter in Latin America, the agriculture sector accounted for almost half of the country’s total GHG emissions, followed by the energy sector that accounted for almost 38% of the country’s GHG emissions.^{76,77} Although 75% of Brazil’s electricity is produced from clean energy sources, the electricity sector is still responsible for almost 9% of the country’s total CO₂ emissions.⁷⁸ In this scenario, Brazil has pledged to reduce its GHG emissions by 37% and 43% by 2025 and 2030, respectively, compared to 2005.⁷⁹ In Mexico, more than 70% of the country’s total GHG emissions come from the energy sector,⁸⁰ since fossil fuels still make up approximately 87% of country’s energy mix.⁸¹ Mexico has set a target to increase the proportion of renewable energy in the country’s energy mix to 35% by 2040 and 50% by 2050.⁸²

Based on the above context, Sustainalytics is of the opinion that the renewable energy projects financed under the Framework are expected to have positive environmental impacts and may contribute to global efforts towards climate targets.

Contribution to SDGs

The Sustainable Development Goals were adopted in September 2015 by the United Nations General Assembly and form part of an agenda for achieving sustainable development by 2030. The instruments issued under the Canadian Solar Green Financing Framework are expected to help advance the following SDG and target:

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

⁶⁹ 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>

⁷⁰ Natural Resources Canada, “Canada Invests Over \$960-Million in Renewable Energy and Grid Modernization Projects”, (2021), at:

<https://www.canada.ca/en/natural-resources-canada/news/2021/06/canada-invests-over-960-million-in-renewable-energy-and-grid-modernization-projects.html>

⁷¹ EIA, “Energy and the environment explained, Where greenhouse gases come from”, at: <https://www.eia.gov/energyexplained/energy-and-the-environment/where-greenhouse-gases-come-from.php>

⁷² US Environmental Protection Agency, “Sources of Greenhouse Gas Emissions”, at: <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>

⁷³ 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/>

⁷⁴ Congressional Research Service, Greenhouse Gas Emissions in the U.S. Electricity Sector: Background, Policies, and Projections, (2023), at: <https://crsreports.congress.gov/product/pdf/R/R47561>

⁷⁵ UNDP, “The challenges of climate mitigation in Latin America and the Caribbean: Some proposals for action”, (2022), at:

<https://www.undp.org/sites/g/files/zskgke326/files/2023-01/PNUDLAC-working-paper-40-climate-EN.pdf>

⁷⁶ Ibid.

⁷⁷ European Parliament, “Brazil’s climate change policies”, (2019), at: [Brazil’s climate change policies \(europa.eu\)](https://www.europa.eu/press-room/media/infographic/eu-climate-action-2019-2020)

⁷⁸ Climate Transparency, “Brazil”, (2020), at: <https://www.climate-transparency.org/wp-content/uploads/2020/11/Brazil-CT-2020-WEB2.pdf>

⁷⁹ Carbon Brief, “Analysis: Brazil’s climate pledge represents slight increase on current emissions”, at: <https://www.carbonbrief.org/analysis-brazils-climate-pledge-represents-slight-increase-on-current-emissions/>

⁸⁰ United States Agency International Development, “Mexico: Climate Change Factsheet”, at: <https://www.usaid.gov/sites/default/files/documents/USAID-Climate-Change-Fact-Sheet-Mexico.pdf>

⁸¹ Climate Transparency, “Mexico”, (2020), at: <https://www.climate-transparency.org/wp-content/uploads/2020/11/Mexico-CT-2020-WEB2.pdf>

⁸² WRI, “Mexico: Policymaking to Ensure Energy Justice in Renewables Development”, at: <https://www.wri.org/update/mexico-policymaking-ensure-energy-justice-renewables-development>

Conclusion

Canadian Solar has developed the Canadian Solar Green Financing Framework under which it and its subsidiaries may issue green bonds, loans and other finance instruments⁸³ and use the proceeds to finance or refinance renewable energy generation and energy storage projects. Sustainalytics considers that the eligible projects are expected to provide positive environmental impacts.

The Canadian Solar Green Financing Framework outlines a process for tracking, allocation and management of proceeds, and makes commitments for reporting on allocation and impact. Sustainalytics considers that the Canadian Solar Green Financing Framework is aligned with the overall sustainability strategy of Canadian Solar and that the use of proceeds will contribute to the advancement of UN Sustainable Development Goal 7. Additionally, Sustainalytics is of the opinion that Canadian Solar has adequate measures to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects.

Based on the above, Sustainalytics is confident that Canadian Solar is well positioned to issue green bonds and loans and that the Canadian Solar Green Financing Framework is robust, transparent and in alignment with the four core components of the Green Bond Principles 2021 and Green Loan Principles 2023.

⁸³ Sustainalytics has not reviewed finance instruments not been listed in the Framework.

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