

Second-Party Opinion

Midsummer Green Bond

Evaluation Summary

Sustainalytics is of the opinion that the Midsummer Green Bond Framework is credible and impactful, and aligns with the four core components of the Green Bond Principles 2018. This assessment is based on the following:



USE OF PROCEEDS The use of proceeds category (Renewable Energy) is recognized as impactful by the Green Bond Principles 2018. Sustainalytics considers that Midsummer’s eligible projects will lead to positive environmental impacts and advance the UN Sustainable Development Goal 7.



PROJECT EVALUATION / SELECTION Midsummer’s project evaluation and selection will be executed by its Green Bond Committee, which consists the CEO, CFO and the Chairman of the Board. Moreover, the Green Bond Committee will also ensure that green bond investments are in line with all relevant internal policies and guiding documents. This process is aligned with market practices.



MANAGEMENT OF PROCEEDS Proceeds of the green bonds will be earmarked and traceability of the net proceeds will be secured through a system in which each investment will be noted in a spreadsheet and assigned a wp account number. If the total amount of proceeds from green bonds exceed the total value of eligible projects, the excess liquidity could be invested according to Midsummer’s liquidity and liability management activities. Sustainalytics views this process in line with market practice.



REPORTING Midsummer will publish annually an investor letter on its corporate website, which will contain an allocation report and an impact report. The allocation reporting will provide a list of approved eligible assets and projects, including the allocated amounts, and the amount invested in each investment category. In its impact reporting, Midsummer will provide relevant data on impact metrics. Sustainalytics views Midsummer’s reporting practices as aligned with market practice.

Evaluation date	March 2019
Issuer Location	Järfälla; Sweden

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Introduction

Midsummer AB (Midsummer) is a developer and supplier of advanced solar energy technology solutions for the production and installation of light-weight, flexible solar panels. Its business offering includes equipment for cost-effective manufacturing of copper, indium, gallium, and selenium (CIGS) light-weight flexible solar cells as well as building-integrated photovoltaic (BIPV) solutions for the application of thin film solar cells on buildings (facades, roofs etc.).

Midsummer has developed the Midsummer Green Bond Framework (the "Framework") under which it is considering to issue green bonds and use the proceeds to finance and refinance, in whole or in part, existing and future projects that increase the use of renewable energy. The Framework defines eligibility criteria in one area:

1. Renewable Energy
 - a. Production and distribution of Solar Panels and Solar Cells
 - b. Production of Solar Panel Manufacturing Equipment
 - c. Research and Development of Solar Panels, Solar Cells and Solar Panel Manufacturing Equipment

Midsummer engaged Sustainalytics to review the Midsummer Green Bond Framework, dated March 2019, and provide a second-party opinion on the Framework's environmental credentials and its alignment with the Green Bond Principles 2018 (GBP).¹ This Framework has been published in a separate document.²

As part of this engagement, Sustainalytics held conversations with various members of Midsummer'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 Midsummer's green bond. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics' opinion of the Midsummer Green Bond Framework and should be read in conjunction with that Framework.

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 Midsummer Green Bond Framework is available on Midsummer's website at: <https://midsummer.se/ir/greenbond>

Sustainalytics' Opinion

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

Summary

Sustainalytics is of the opinion that the Midsummer Green Bond Framework is credible and impactful, and aligns with the four core components of the Green Bond Principles 2018. Sustainalytics highlights the following elements of the Midsummer Green Bond Framework:

- Use of Proceeds:
 - The use of proceeds category (Renewable Energy) is recognized as impactful by the Green Bond Principles 2018. Sustainalytics considers that Midsummer's Framework will support the expansion of renewable energy capacity through the research, development, production and distribution of solar panel systems, solar cells and solar panel manufacturing equipment.
 - Sustainalytics has a positive opinion on Midsummer's production and research and development of CIGS thin solar cells which are not only more energy efficient than traditional counterparts but are also more environmentally-friendly, since they do not use toxic materials such as cadmium.
 - Sustainalytics recognizes that the use of proceeds may be allocated to operational expenditures (OPEX) including:
 - the selling, marketing and installation of Midsummer's solar panels and solar cells. Given the nature of Midsummer's business, Sustainalytics believes that OPEX is directly tied to facilitating the installation of these products and sustaining positive environmental impacts.
 - potential bolt-on acquisition of companies which relate to the selling and installation of Midsummer's products. Sustainalytics considers such acquisition to contribute to Midsummer's solar energy portfolio. Additionally, Sustainalytics has been assured that any possible acquisition activities would be for the purpose of expanding the company's ability to deliver solar technology and that Midsummer will only acquire companies which revenues stem from renewable energy at a minimum 90%, targeting 100%.
 - Midsummer applies a 24-month look-back period to refinancing, which Sustainalytics considers to be aligned with market practice.
- Project Evaluation and Selection:
 - Midsummer has established an internal Green Bond Committee, consisting of the CEO, CFO and the Chairman of the Board, responsible for evaluating and selecting assets and projects eligible for green bond funding according to the Eligibility Criteria. Moreover, the Green Bond Committee will also ensure that green bond investments are in line with all relevant internal policies and guiding documents. Sustainalytics considers this system process to be aligned with market practice.
- Management of Proceeds:
 - Midsummer commits to earmarking net proceeds of all bonds issued under its Framework for eligible activities. Midsummer will also ensure the traceability of the net proceeds through a system whereby each expenditure will be noted in a spreadsheet and assigned a wp account number. Additionally, if the total amount of proceeds from green bonds exceed the total value of eligible projects, the excess liquidity could be invested according to Midsummer's liquidity and liability management activities. Sustainalytics assesses Midsummer's management of proceeds to be aligned with market practice.
- Reporting:
 - Midsummer commits to publishing an annual investor letter on its corporate website, which will contain an allocation report and an impact report.
 - The allocation reporting will provide examples of projects and assets financed by green bonds, a list of approved eligible assets and projects, including the allocated amounts, amounts invested in each investment category as defined in the Use of Proceeds section and the balance of the green bond account. In its impact reporting, Midsummer will provide data on impact

- metrics such as: annual GHG emissions avoided, number of units produced, and number of patents acquired and filed.
- Sustainalytics considers that Midsummer's allocation and impact reporting are in line with market practice.

Alignment with Green Bond Principles 2018

Sustainalytics has determined that Midsummer's Green Bond Framework aligns to the four core components of the Green Bond Principles 2018. For detailed information please refer to Appendix 1: Green Bond/Green Bond Programme External Review Form.

Section 2: Sustainability Strategy of the Issuer

Contribution of Framework to issuer's sustainability mandate

Midsummer is a pure-play issuer providing solar energy technology solutions for the production and installation of light-weight flexible solar panels, such as turnkey systems (the Midsummer DUO) for manufacturing of flexible solar cells with an in-house proprietary CIGS process, and CIGS flexible solar modules.³ Solar power represents one of the most inexhaustible renewable energy opportunities, and with the installation of Midsummer light-weight flexible solar panels it can be produced on top of building roofs, landfills and vehicles, and is a fuel source that is pollution and noise free.⁴ Each Midsummer DUO tool possesses an annual solar cell production capacity of 5MW, which could generate electricity of approximately 5GWh annually in Sweden and avoid 5000 tonnes of CO₂ emissions emitted from coal power plants.⁵

Within Midsummer's CSR Policy and Code of Conduct,⁶ the company commits to protecting the environment, by manufacturing environmentally compliant products, and contributing towards sustainable development. Moreover, Midsummer's Environmental Policy expresses the company's goal of lowering the environmental footprint of both its own operations and that of its customers, through the use of its solar panels.⁷ Midsummer also discloses that it aims to increase its resource efficiency, reduce its energy consumption and chemical use, use as few environmentally hazardous substances as possible, and continue utilizing only electricity from renewable sources (hydropower and solar power).⁷

Considering the above, Sustainalytics is confident that the Midsummer Green Bond Framework provides clear environmental benefits as it constructs solar panels and generates renewable energy.

Well positioned to address common environmental and social risks associated with the projects

Based on the use of proceeds, the main environmental and social risks related to solar panel production and renewable energy generation are related to occupational health and safety at work, end of life recycling, customer safety and supply chain.

Midsummer, as a company operating in Sweden, must comply with the Swedish health and safety regulations established in the Work Environment Act (1977:1160), whose purpose is to prevent occupational accidents and illness and to ensure a good work environment.⁸ Moreover, the Swedish National Electrical Safety Board's regulations compels companies to respect the safety regulations when dealing with electrical installations, including solar panels.⁹ Regarding its supply chain, as a company operating in the EU,

³ Midsummer, at: <https://midsummer.se/>

⁴ National Geographic, "Solar Energy", at: <https://www.nationalgeographic.com/environment/global-warming/solar-power/>

⁵ Midsummer, "Environment", at: <https://midsummer.se/technology/environment/>

⁶ Midsummer CSR Policy and Midsummer Code of Conduct.

⁷ Midsummer Environmental Policy.

⁸ Work Environment Act (1977:1160), at: <https://www.government.se/4ac754/contentassets/86e9091526644e90b78d2ff937318530/sfs-19771160-work-environment-act>

⁹ National Electrical Safety Board's regulations, (2017), at: <https://www.elsakerhetsverket.se/globalassets/foreskrifter/engelska/elsak-2017-3-english.pdf>

Midsummer must comply with the critical raw materials regulation from May 2017,¹⁰ which prevents the company from sourcing its materials from high risk countries.

A simplified life cycle assessment (LCA) on solar cells and modules from Midsummer has been performed (from cradle to gate) in order to ascertain the environmental impact of the company's products. The LCA was performed by a third-party certifier that reviewed Midsummer's CIGS solar cells based on the ISO 14040:2006 and ISO 14044:2006 requirements. The analysis reported that Midsummer's CIGS solar cells produced a relatively low environmental impact and are good electricity production alternatives with minimal climate effects. Furthermore, the CIGS solar panels installed on factory roofs in Sweden and China demonstrated that they had negligible or no impact in the overall carbon footprint during this LCA scenario. In conclusion, the report showed that Midsummer's CIGS solar cells were found to display one of the lowest carbon footprints compared to silicon solar cells as well as other energy sources such as wind energy and nuclear energy. Moreover, Midsummer's solar cells do not contain cadmium, a toxic material that is usually utilized in solar cells and banned in certain states.⁵ This ensures that not only the consumers are safe from poisoning, but that the production and recycling process can realized in a safely manner. Additionally, Midsummer's solar panels have been certified by Kiwa according to IEC 61646 and IEC 61730,³ which are certifications for resilience and, respectively, safety qualification specifically designed for solar panels.¹¹

Overall, Sustainalytics considers that Midsummer has performed environmental due diligence through the LCA process and is well positioned to mitigate potential risks related to its products.

Section 3: Impact of Use of Proceeds

Importance of Innovation in Solar Panels

In 2018, 92% of solar panels were constructed from silicon, 5% from cadmium telluride and only around 2% from copper indium gallium selenide (CIGS).¹² Although CIGS is considered more environmentally responsible, a significant issue concerning their production would be the fact that some of the CIGS solar panels may contain cadmium,¹³ a toxic material that can produce adverse effects on humans and the environment. However, Midsummer's solar cell products are manufactured without cadmium, thus mitigating the negative effects it could have for its customers.¹³ Sustainalytics has a positive opinion on Midsummer's production of CIGS thin solar cells without toxic materials, which are not only more energy efficient than its traditional counterparts but are also more environmentally-friendly.

Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 and form an agenda for achieving sustainable development by the year 2030. This green bond advances the following SDG goal 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.

¹⁰ European Commission, "Critical Raw Materials", at http://ec.europa.eu/growth/sectors/raw-materials/specific-interest/critical_en

¹¹ IEC certifications: IEC 61215, IEC 61646 and more explained (2011), at: <https://sinovoltaics.com/learning-center/certifications/iec-certifications/>

¹² Ramanujam, J. and Singh, U.P. (2017), "Copper indium gallium selenide based solar cells – a review", at:

https://www.researchgate.net/publication/316284337_Copper_indium_gallium_selenide_based_solar_cells_-_Review

¹³ Energysage, "Types of thin film solar panels", (2019); <https://www.energysage.com/solar/101/about-solar-panels/thin-film-solar-panels-amorphous-cadmium-telluride-and-cigs/>

Conclusion

Midsummer has developed the Midsummer Green Bond Framework under which it will issue green bonds to finance and refinance eligible solar energy technology to increase the use of renewable energy. Sustainalytics has a positive opinion on Midsummer's production and R&D of CIGS thin solar cells, without the use of toxic materials such as cadmium, which are not only more energy efficient than its traditional counterparts but are also more environmentally-friendly. As such, Sustainalytics is of the opinion that the projects described in the Framework will deliver positive environmental impacts.

The Framework is aligned with the four core components of the Green Bond Principles 2018; Midsummer has formed a Green Bond Committee to oversee its green bond; transparent procedures have been put in place for the management and tracking of funds; and commitments have been made to report on bond allocation and impacts. Additionally, the Use of Proceeds will contribute to the advancement of UN Sustainable Development Goal 7: Affordable and Clean Energy.

Based on the above, Sustainalytics is confident that Midsummer is well-positioned to issue green bonds, and that the Midsummer Green Bond Framework is robust, transparent, and in alignment with the Green Bond Principles 2018.

Appendices

Appendix 1: Green Bond / Green Bond Programme - External Review Form Section 1. Basic Information

Issuer name:	Midsummer AB
Green Bond ISIN or Issuer Green Bond Framework Name, if applicable: <i>[specify as appropriate]</i>	Midsummer Green Bond Framework
Review provider's name:	Sustainalytics
Completion date of this form:	March 12, 2019
Publication date of review publication: <i>[where appropriate, specify if it is an update and add reference to earlier relevant review]</i>	

Section 2. Review overview

SCOPE OF REVIEW

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

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

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

ROLE(S) OF 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 use of proceeds category (Renewable Energy) is recognized as impactful by the Green Bond Principles 2018. Sustainalytics considers that Midsummer's eligible projects will lead to positive environmental impacts and advance the UN Sustainable Development Goal 7.

Use of proceeds categories as per GBP:

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

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

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section *(if applicable)*:

Midsummer's project evaluation and selection will be executed by its Green Bond Committee, which consists the CEO, CFO and the Chairman of the Board. Moreover, the Green Bond Committee will also ensure that green bond investments are in line with all relevant internal policies and guiding documents. This process is aligned with market practices.

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 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 checked="" type="checkbox"/> In-house assessment |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

3. MANAGEMENT OF PROCEEDS

Overall comment on section (*if applicable*):

Proceeds of the green bonds will be earmarked and traceability of the net proceeds will be secured through a system in which each investment will be noted in a spreadsheet and assigned a wp account number. If the total amount of proceeds from green bonds exceed the total value of eligible projects, the excess liquidity could be invested according to Midsummer's liquidity and liability management activities. Sustainalytics views this process 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 type="checkbox"/> Allocation to a portfolio of disbursements |
| <input 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):

Midsummer will publish annually an investor letter on its corporate website, which will contain an allocation report and an impact report. The allocation reporting will provide a list of approved eligible assets and projects, including the allocated amounts, and the amount invested in each investment category. In its

impact reporting, Midsummer will provide relevant data on impact metrics. Sustainalytics views Midsummer's reporting practices 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*):

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*):

Frequency:

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

Information reported (expected or ex-post):

- GHG Emissions / Savings Energy Savings
- Decrease in water use Other ESG indicators (*please specify*): Number of units produced, A list of all research projects and their expected environmental benefit in terms of Solar Energy generated and estimates of improvements in terms of CO2 or CO2-equivalent emissions avoided, Number of patents acquired, Number of patents filed

Means of Disclosure

- Information published in financial report Information published in sustainability report

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Sustainalytics

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For more information, visit www.sustainalytics.com

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