

Sustainalytics Second Party Opinion

TeraWulf Sustainable Finance Framework

14 October 2025

Framework owner and location:
TeraWulf Inc.
Easton, US

Sector:
Digital Infrastructure

Overall Assessment

Sustainability Contribution



Principles Alignment

✓ **Aligned**

Green Bond Principles 2025

Contribution to SDGs



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Assessment Summary

TeraWulf has developed the TeraWulf Sustainable Finance Framework dated October 2025, under which it intends to issue bonds, including asset-backed securities and other green finance instruments to fund projects in the US in one environmental category.

We have assessed the overall Sustainability Contribution of the Framework as **Strong**, based on the Sustainability Contribution of the Framework's single use of proceeds category.

TeraWulf intends to finance environmental expenditures in the Energy Efficiency category, with a focus on the design, construction and operation of the data centres and research and development (R&D) expenditures to improve the energy efficiency of eligible assets. The Company will finance eligible data centres with an operational power usage effectiveness (PUE) of 1.45 or below for existing and a design PUE of 1.4 or below for new builds. Such investments under the category are expected to contribute strongly to the decarbonization of the digital infrastructure sector.

We have assessed the Framework as **Aligned** with the Green Bond Principles 2025.

Breakdown per Use of Proceeds Category

We have assessed the overall Sustainability Contribution of the Framework as **Strong**, based on the Sustainability Contribution of the Framework's single use of proceeds category.

Category	Sustainability Contribution Level	Weight
Energy Efficiency	▲ Strong NeutralModerateSignificant	100%

Issuer Overview and Sustainability Strategy

TeraWulf is a digital infrastructure company headquartered in Easton, Maryland, that develops, owns, and operates digital asset mining and high-performance computing (HPC) data centre solutions in the US.¹ The Company currently operates facilities at its Lake Mariner campus in New York and is strategically expanding its capacity for artificial intelligence (AI) and HPC workloads. Upon full buildout, the Lake Mariner campus is expected to have up to 750 MW of total infrastructure capacity, along with the development of an additional 400 MW of infrastructure capacity at the Cayuga site in New York.^{2,3}

The Company integrates environmental factors into its sustainability strategy, focusing on: i) zero-carbon energy; ii) grid stabilization; iii) waste reduction; and iv) sustainable supply chains. The Company is committed to maximizing zero-carbon energy utilization and energy efficiency in its operations.⁴ As of 2024, more than 91% of TeraWulf's operational energy consumption was from low-carbon energy sources such as hydrogen and nuclear power.⁵ Regarding grid stability, the Company is using real-time demand responsive load programmes, which balance supply and demand and reduce grid stress.⁶ For waste and resource management, TeraWulf undertakes initiatives to minimize e-waste and deploys smart metering and advanced cooling technologies, including closed-loop liquid cooling, to maximize energy efficiency. In 2024, the Company partnered with certified e-waste recyclers and recycled outdated application-specific integrated circuit miners and IT equipment, which awarded it with the equivalent of 8,000 metric tons of CO₂ credits.⁷ Regarding its suppliers, the Company's Supplier Code of Conduct expects its suppliers to manage and mitigate their environmental impact throughout the product lifecycle, by means of reducing their carbon and water footprint and improving resource utilization.⁸

The Company's sustainability oversight is delegated to the Sustainability Committee, which is comprised of three members, including the Chairman of the Board. The Committee is informed by the executive management team regarding ESG-related news and updates and reports to the Board of Directors.⁹

The Company reports its sustainability-related data, including a comprehensive overview of its ESG initiatives and achievements, in its Corporate Social Responsibility Report, on an annual basis.¹⁰

¹ TeraWulf, About Us, at: <https://www.terawulf.com/about>

² TeraWulf, "TeraWulf Enters Into Long-Term Ground Lease at Lake Mariner Facility to Attract High-Quality Customers", (2024), at: <https://investors.terawulf.com/news-events/press-releases/detail/88/terawulf-enters-into-long-term-ground-lease-at-lake-mariner>

³ TeraWulf, "TeraWulf Secures Long-Term Ground Lease at Cayuga Site to Expand High-Performance Computing Infrastructure", (2025), at: <https://investors.terawulf.com/news-events/press-releases/detail/113/terawulf-secures-long-term-ground-lease-at-cayuga-site-to>

⁴ TeraWulf, "Corporate Social Responsibility Report FY2024", (2025), at: <https://d1io3yog0oux5.cloudfront.net/>

⁵ New York ISO, "2024 Power Trends", at: <https://www.nyiso.com/documents/20142/2223020/2024-Power-Trends.pdf/31ec9a11-21f2-0b47-677d-f4a498a32978>

⁶ TeraWulf, Corporate Social Responsibility Report (2024), at: <https://d1io3yog0oux5.cloudfront.net/>

⁷ Ibid.

⁸ TeraWulf, "Supplier Code of Business Conduct and Ethics", at: <https://d1io3yog0oux5.cloudfront.net/>

⁹ TeraWulf, "Corporate Social Responsibility Report FY2024", (2025), at: <https://d1io3yog0oux5.cloudfront.net/>

¹⁰ Ibid.

Principles Alignment

We have assessed the TeraWulf Sustainable Finance Framework as follows:

Green Bond Principles – **Aligned**

TeraWulf intends to issue secured and unsecured bonds including asset-backed securities and other green finance instruments¹¹ under the Framework.

The Company will transparently distinguish between secured green collateral bonds and secured green standard bonds in the respective offering documents, as defined by ICMA in the Green Bond Principles 2025. The Company will apply the net proceeds from secured green standard bonds exclusively toward eligible projects. The underlying collateral for the secured green collateral bonds will align with the eligibility criteria outlined in the Framework. In addition, there will be no double counting of eligible projects under the secured green standard and collateral bonds with any other outstanding green financing instrument.

Principles Alignment Detailed Evaluation

Use of Proceeds

Aligned

Alignment with core requirements

- ▶ The Framework describes eligibility criteria appropriately.
- ▶ All expenditures are expected to provide clear environmental benefits.

Project Evaluation and Selection

Aligned

Alignment with core requirements

- ▶ The Framework describes a governance process for the evaluation and selection of eligible projects.
- ▶ The Framework communicates the environmental or social sustainability objectives of eligible projects.
- ▶ The Framework describes a process to identify and manage perceived environmental and social risks associated with eligible projects.

Additional considerations

- ▶ TeraWulf has committed to the following practices, which go beyond the core requirements:
 - ▶ TeraWulf describes how eligible projects support its overarching sustainability objectives and strategy.
 - ▶ The Framework identifies the SDGs to which eligible projects are expected to contribute.

Management of Proceeds

Aligned

¹¹ Sustainability's opinion is limited to the financial instruments explicitly listed in the Framework
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Alignment with core requirements

- ▶ The Framework describes a governance structure for the management of proceeds.
- ▶ The Framework describes the processes and systems that will be used to track the proceeds.
- ▶ The Framework describes the intended temporary placement for the balance of unallocated proceeds.

Additional considerations

- ▶ The Company will manage the proceeds from the financing using a portfolio approach.
- ▶ TeraWulf has committed to the following practices which go beyond the core requirements:
 - ▶ Pending full allocation, temporary proceeds will be held in cash, cash equivalents, short-term investments, or used to repay other borrowings. The Company will exclude investments and debt repayment related to carbon-intensive or controversial activities during temporary allocation.
 - ▶ TeraWulf intends to obtain an independent third-party verification report to verify the internal tracking and that the net proceeds from the issuance of its financial instruments under the Framework have been allocated to eligible projects.

Reporting**Aligned***Alignment with core requirements*

- ▶ The Company will provide an annual allocation report until full allocation of proceeds and renew it in case of material changes until maturity.

Additional considerations

- ▶ For the financial instruments that require full allocation at the time of issuance, the Company will provide upfront allocation reporting.
- ▶ TeraWulf has committed to the following practices which go beyond the core requirements:
 - ▶ TeraWulf will publish its allocation report on its website.
 - ▶ TeraWulf will report on the qualitative and quantitative impacts of projects using relevant metrics publicly within its Corporate Social Responsibility Report.
 - ▶ TeraWulf will adopt the recommendations in ICMA Harmonized Framework for Impact Reporting, where feasible.
- ▶ The Framework indicates at least one impact metric for the use of proceeds category.

Sustainability Contribution

TeraWulf intends to use the proceeds from instruments issued under the Framework to finance and refinance capex, opex and R&D of energy efficiency projects, which are expected to lead to an improvement in the decarbonization of data centres in the US.

We have assessed the overall Sustainability Contribution of the Framework as **Strong**, based on the Sustainability Contribution of the Framework's single use of proceeds category.

Sustainability Contribution



Sustainability Contribution per Use of Proceeds Category

Energy Efficiency



We have assessed the Sustainability Contribution of the Energy Efficiency category as **Strong**.

Investments under the category include financing and refinancing the design, construction, maintenance and related R&D activities for new and existing data centres that are highly energy efficient. Such investments are expected to strongly contribute to the decarbonization of the data centre industry.

Category Expenditures

Expenditure	Description
New and existing data centres and supporting infrastructure	▶ Design, construction and maintenance of: ▶ Existing, retrofitted and upgraded data centres with a 12-month rolling average operational PUE of 1.45 or below; and ▶ New data centres with a design PUE of 1.4 or below. × R&D expenditures that are intended to improve the energy efficiency of the data centres financed under this category.

Additional Information

- × The Company is financing and refinancing six data centre buildings in the Lake Mariner Campus in New York City, with a total gross capacity of 522.5 MW. The project is divided into two sub-projects under two subsidiaries of the Company:
 - × Project 'La Lupa' consists of Wulf Den, CB-1 and CB-2 data centres with a total gross capacity of 75.2 MW. Wulf Den and CB-1 began operations in July and August 2025, respectively, while CB-2 is expected to commence operations in November 2025.
 - × Project 'Akela' consists of CB-3, CB-4 and CB-5 data centres with a total gross capacity of 450 MW. All data centres are currently under construction with an expectation to begin operations in 2026.

Analytical Commentary

Data centres contain energy-intensive equipment, technologies and services that consume a significant amount of electricity.¹² Global data centres consumed an estimated 240-340 terawatt-hours of electricity in 2022, which represented about 1-1.3% of the global final electricity demand that year.¹³ By 2030, global electricity demand from data centres is expected to more than double to 945 TWh.¹⁴ To curb the increase in data centres' power consumption, continual energy efficiency improvements through advanced servers, storage devices, network switches and infrastructure are required.¹⁵

The investments under this category target energy-efficient data centres with a design or average operational PUE of 1.4 or 1.45 or below, for new and existing assets. PUE is a key measure of a data centre's energy efficiency, which is calculated as the total electricity demand of a data centre divided by the electricity demand of its IT equipment.¹⁶ Studies have shown that the average regional PUE of data centres can vary based on cooling technologies, efficiencies and climate zones, with hot and arid climates leading to relatively higher PUE values due to the need for more intensive cooling.¹⁷ Eligible data centres with a PUE of 1.5 or below are expected to be highly energy efficient and strongly contribute to decarbonizing the digital infrastructure sector.

¹² IEA, "Energy demand from AI", (2025), at: <https://www.iea.org/reports/energy-and-ai/energy-demand-from-ai>

¹³ This excludes energy used for cryptocurrency mining, which was 110 terawatt hours in 2022.

IEA, "Data Centres and Data Transmission Networks", (2023), at: <https://www.iea.org/energy-system/buildings/data-centres-and-data-transmission-networks>

¹⁴ IEA, "AI is set to drive surging electricity demand from data centres while offering the potential to transform how the energy sector works", (2025), at: <https://www.iea.org/news/ai-is-set-to-drive-surging-electricity-demand-from-data-centres-while-offering-the-potential-to-transform-how-the-energy-sector-works>

¹⁵ US Department of Energy, "United States Data Center Energy Usage Report", (2016), at: <https://betterbuildingssolutioncenter.energy.gov/resources/united-states-data-center-energy-usage-report>

¹⁶ Shehabi, A. et al. (2024), "2024 United States Data Center Energy Usage Report", Lawrence Berkeley National Laboratory, at: <https://escholarship.org/uc/item/32d6m0d1>

¹⁷ Lei, N. et al. (2022), "Climate- and technology-specific PUE and WUE estimations for U.S. data centers using a hybrid statistical and thermodynamics-based approach", Resources, Conservation and Recycling, at: <https://www.sciencedirect.com/science/article/abs/pii/S0921344922001719>

Environmental and Social Risk Management

We have identified the following areas of environmental and social risk associated with the expenditures eligible under the Framework: land use and biodiversity; emissions, effluents and waste from construction; occupational health and safety; community relations, and cybersecurity and data privacy. TeraWulf has the following policies and processes in place to identify and mitigate such risks.

E&S risk identified	Applicable policies, procedures and measures
Land use and biodiversity	▶ TeraWulf's Sustainability Committee creates, reviews and revises the Company's sustainability practices related to energy use, consumption of resources, waste disposal, and climate risks. The Committee is also responsible for monitoring trends in corporate sustainable management and recommending any relevant changes, where necessary.¹⁸ ▶ Furthermore, TeraWulf does not use water for cooling in any Bitcoin mining operations and additionally does not conduct any operations in areas that experience high levels of water stress.¹⁹
Emissions, effluents and waste from construction	▶ TeraWulf has implemented protocols for recycling materials, including steel, plastic, aluminium, copper and cardboard. Additionally, TeraWulf's prioritizes the responsible management of IT hardware components by ensuring that they are refurbished, recycled and repurposed, where possible.²⁰ ▶ TeraWulf complies with all local laws and regulations related to emissions, effluents and waste, including the US Environmental Protection Agency's Clean Air Act of 1970²¹ and Clean Water Act of 1972,²² which establish standards for air emissions and wastewater, respectively, to protect public health.
Occupational health and safety	▶ TeraWulf's Human Rights Policy includes procedures related to discrimination, harassment, and retaliation with zero tolerance for prejudice or bigotry.²³ ▶ All US-based projects are subject to applicable laws and regulations, notably the Occupational Safety and Health Act of 1970.²⁴
Community relations	▶ TeraWulf's ESG Policy includes commitments for community engagement with respect to its operations.²⁵
Cybersecurity and data privacy	▶ TeraWulf's Information Security and Cybersecurity Policy establishes standards to safeguard the confidentiality, integrity and availability of information and IT assets that support the Company's business operations.²⁶ ▶ TeraWulf has implemented a Risk Management Program to identify, evaluate and prioritize potential risks, including internal and external assessments of its Cyber Policy.²⁷

¹⁸ TeraWulf, "Sustainability Policy", at: https://d1io3yog0oux5.cloudfront.net/_64d1a75f7d5702575c980d6ebb1e58d8/terawulf/db/2275/21512/file/WULF+-+Sustainability+Policy+%28Final+8-4-23%29.pdf

¹⁹ TeraWulf, "Corporate Social Responsibility Report FY2024", (2025), at: <https://d1io3yog0oux5.cloudfront.net/>

²⁰ Ibid.

²¹ EPA, "Clean Air Act", (1970), at: <https://www.epa.gov/laws-regulations/summary-clean-air-act>

²² EPA, "Clean Water Act", (1972), at: <https://www.epa.gov/laws-regulations/summary-clean-water-act>

²³ TeraWulf, "Human Rights Policy", at: https://d1io3yog0oux5.cloudfront.net/_64d1a75f7d5702575c980d6ebb1e58d8/terawulf/db/2275/21511/file/WULF+-+Human+Rights+Policy+%28Final+8-4-23%29.pdf

²⁴ US Department of Labor, "OSH Act of 1970", (2004), at: <https://www.osha.gov/laws-regs/oshact/completeoshact>

²⁵ TeraWulf, "Corporate Social Responsibility Report FY2024", (2025), at: <https://d1io3yog0oux5.cloudfront.net/>

²⁶ TeraWulf, "Information Security and Cybersecurity Policy", (2024), at: https://d1io3yog0oux5.cloudfront.net/_f8057ec7adc7da2da32a109e31ade951/terawulf/db/2275/21540/file/TeraWulf+Information+Security+and+Cybersecurity+Policy.pdf

²⁷ Ibid.

Annex 1: Assessment Framework Overview

The following is a brief overview of the [Assessment Framework](#) that we use to assess debt instruments and the frameworks that support them. Using this Assessment Framework, we provide two key signals in our Second Party Opinions: **Principles Alignment** and **Sustainability Contribution**.

Principles Alignment indicates a framework's alignment with the requirements of applicable sustainable debt market Principles.²⁸ This assessment is structured according to the four components of the Principles: Use of Proceeds, Project Evaluation and Selection, Management of Proceeds and Reporting. Principles Alignment is expressed at one of following levels:

- ▶ **Aligned:** Meets all requirements across the four components.
- ▶ **Partially Aligned:** Meets requirements on two or three of the four components.
- ▶ **Not Aligned:** Does not meet requirements on most or all of the four components.

In addition, we provide commentary on any shortcomings as well as best practices.

Sustainability Contribution provides a clear and comparable signal of the expected contribution of the use of proceeds to one or more environmental or social objectives. We assess each expenditure defined in a framework by looking at the activities, assets and projects that they finance. This assessment is carried out using a set of factors that we have identified as driving the expenditure's contribution to a primary objective as well as its avoidance of harm to other objectives. The assessment results in one of the four levels of Sustainability Contribution described in the table below.

We determine the average contribution of the expenditures within each use of proceeds category (as defined by the issuer) to produce an expected Sustainability Contribution for each category. We then aggregate across categories to determine the Sustainability Contribution of a framework overall. In most cases, weight is distributed equally across use of proceeds categories. However, we adjust the weighting if information regarding percentage allocation is provided by the issuer.

Level of Sustainability Contribution	Description
	The expenditure finances an activity that makes a strong contribution to an environmental or social objective. The activity is well aligned with credible standards; there are no significant lock-in risks; and the risk of negative impact to other sustainability objectives is low.
	The expenditure finances an activity that makes a significant positive contribution to an environmental or social objective while having minor shortcomings compared to a strong contribution. This is either because the activity falls somewhat short of credible standards; there is some risk of lock-in (in the case of some environmental activities); there is a risk of negative impact to other sustainability objectives; or there is some ambiguity in the criteria for the expenditure.
	The expenditure finances an activity that represents a step towards an environmental or social objective but has substantial shortcomings compared to expenditures that make a strong contribution. Although the activity will result in benefit over a relevant baseline, either it falls substantially short of credible standards; there is significant

²⁸ These primarily include the Green Bond Principles and the Social Bond Principles, published by the International Capital Market Association (ICMA); and the Green Loan Principles and the Social Loan Principles, published by the Loan Syndications and Trading Association, the Loan Market Association, the Asia Pacific Loan Market Association (LSTA-LMA-APLMA), and the Association of Southeast Asian Nations (ASEAN).

risk of lock-in; there is significant ambiguity in the criteria; or there is a risk of significant negative impact to other sustainability objectives.



The expenditure finances an activity that entails no net positive contribution to environmental or social objectives. Even in cases where there is some positive contribution to an objective, this is offset by shortcomings in other areas. Alternatively, the eligibility criteria may be unclear to the extent that contribution cannot be determined.

Scope of Work and Limitations

This Second Party Opinion provides a point-in-time independent opinion of the Framework as of the Evaluation Date. Our opinion may consider additional documentation and information that the Framework owner may have provided during the engagement, in addition to public and non-public information. The owner refers to the entity featuring as an issuer, borrower, special-purpose vehicle or any other entity as described in the Framework.

As part of this engagement, we communicated with representatives of the Framework owner, who acknowledge that: i) it is the sole responsibility of the Framework owner to ensure that the information provided is complete, accurate and up to date; ii) they have provided us with all of the relevant information; and iii) that all of the information has been provided in a timely manner.

This Second Party Opinion provides our opinion of the Framework and should be read in conjunction with that Framework. Any update of this Second Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and the Framework owner.

Our Second Party Opinion provides our opinion on the alignment of the Framework with current market standards and practice but provides no guarantee of alignment nor warrants alignment with future versions of any such standards. In addition, it does not guarantee the realized allocation of proceeds towards eligible activities.

No information provided in this Second Party Opinion shall be considered as being a statement, representation, warrant or argument in favour or against the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that the Framework owner may have made available to Sustainalytics for the purpose of this Second Party Opinion.

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