

# Green Securitized Notes

**Allocation and Impact Report** 

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# **Sustainability at Aligned**

Aligned Data Centers is a leading technology infrastructure company offering innovative, sustainable, and adaptive Scale Data Centers and Build-to-Scale solutions for global hyperscale and enterprise customers. Sustainability is, and will always be, at the core of what we

Our intelligent infrastructure allows densification and vertical growth within the same footprint, enabling customers to scale up without disruption, all while maintaining industry-leading Power Usage Effectiveness (PUE). By reducing the energy, water, and space needed to operate, our data center solutions, combined with our patented cooling technology, offer businesses a competitive advantage by improving sustainability, reliability, and their bottom line. Our patented and award-winning cooling technology, the Delta Cube (Delta<sup>3</sup>), requires significantly less energy and water compared to conventional data center cooling technologies. It can also be combined with a state-of-the-art waterless heat rejection system, preserving local water resources.

To us, being a sustainable data center operation is about committing to sustainable practices and principles across every facet of our organization: from the partners we choose to work with, to the way we structure our supply chain, to the way we approach design, construction, fit-out and operation of our data centers.

In this spirit, we set a number of sustainability goals to drive our performance, including:

- Matching 100% of our annual energy consumption to zero- carbon renewable energy
- Reducing our overall energy and water consumption and implementing a waterless design standard across all new data center builds
- Partnering with our customers on a path to net zero emissions across our portfolio
- Using renewable, recyclable, and low- to zero-VOC materials across all our data centers
- Employing sustainability and environmental consciousness as key metrics for our supplier selection and supply chain processes
- Creating a safe and environmentally friendly space for customers, partners, and staff
- Ensuring transparency across all sustainability best practices and reporting

More information on the sustainability strategy and practices of Aligned can be found at: Sustainability | Aligned

# **Aligned Sustainable Finance Framework**

Aligned Green Finance Framework (the "Framework") follows the Green Bond Principles (GBP) 2021 and the Green Loan Principles (GLP) 2021.

All proceeds from green finance instruments issued under this Framework ("Green Financing") will be allocated to finance or refinance green investments, which are defined, selected, tracked, and reported on in accordance with the Framework ("Eligible Green Assets").

Under the Framework, Aligned has defined the Eligible Green Assets as investments in data center infrastructure that target the following PUE requirements:

- PUE of 1.35 or below for data center infrastructure that uses water-based cooling technologies
- PUE of 1.45 or below for data center infrastructure that uses water-free cooling technologies

The Eligible Green Assets fall under the Energy Efficiency category as defined in the GBP and GLP.

Sustainalytics issued a Second Party Opinion which confirms that the Framework aligns with the GBP and GLP and with market practices.

Please refer to the Aligned Green Finance Framework and Second Party Opinion (Sustainalytics) for more information.



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# **Management Assertion**

The Aligned Sustainability Committee asserts that the net proceeds of the securitized notes in the total amount of US\$1,240 million ("Green Securitized Notes"), including (i) Series 2022-1 issued in Nov-22 of \$400 million Class A-2 Term Notes, (ii) Series 2023-1 issued in Aug-23 of \$540 million Class A-2 Term Notes, and (ii) Series 2023-2 issued in Nov-23 of \$300 million Class A-2 Term Notes, were fully allocated in accordance with the use of proceeds requirements in the Aligned Green Finance Framework.

N	et	Pro	ceed	Is Al	location

100% of the proceeds from the Green Securitized Notes were used by Aligned to refinance the Eligible Green Assets. The table on the right shows an overview of the Green Eligible Projects to which the allocation was made.

Campus	Cooling Technology	Design PUE
Salt Lake City, UT	Water-based	1.35
Ashburn, VA	Water-based	1.35
Northlake, IL	Water-free	1.45

# **Impact Metrics and Equivalencies**

Impact metrics estimate the environmental result associated with the allocation of Green Securitized Notes proceeds. The selected metrics and methodology have been informed by The Green Bond Principles Harmonized Framework for Impact Reporting (ICMA, April 2020/June 2022). The impact metrics below illustrate the environmental performance of all current and previous "Eligible Green Projects" in Aligned's portfolio that have received an allocation of the net proceeds from Green Securitized Notes.

Environmental Impact Metrics	Total Estimated Savings (ANNUAL)
Energy savings due to low design PUEs <sup>1</sup>	125,256 MWh
Scope 2 greenhouse gas emissions avoided due to low design PUE <sup>1</sup>	39,681 mtCO2e
Scope 2 greenhouse gas emissions avoided due to 100% of energy consumption matched with renewable energy sources <sup>2</sup>	74,313 mtCO2e

The annual total greenhouse gas emissions avoided from the eligible assets are estimated to be equivalent to removing approximately 17,127 gasoline- powered passenger vehicles from the road for one year. The annual energy savings based on low design PUE of the eligible assets are estimated to be equivalent to 6,442 average US homes' energy use for one year.3

Annual total of greenhouse gas emissions avoided is equivalent to:



gasoline-powered passenger vehicles for one year

Annual energy savings based on low design PUE is equivalent to:



average US homes' energy use for one year

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Davis, J., Donnellan, D., Simon, L., Smolaks, M., Lawrence, A., and Bizo, D. (2022, September 14). Uptime Institute Global Data Center Survey Results 2022. Uptime Institute. Retrieved October  $18, 2022, from \ https://uptimeinstitute.com/resources/research-and-reports/uptime-institute-global-data-center-survey-results-2022$ 

<sup>&</sup>lt;sup>2</sup> Comparing the greenhouse gas emissions calculated using the market-based approach with and without credit for the purchase of renewable energy sources.

<sup>&</sup>lt;sup>3</sup> Environmental Protection Agency. (2023, July). Greenhouse Gas Equivalencies Calculator. EPA. Retrieved December 18, 2023, from https://www.epa.gov/energy/ greenhouse-gasequivalencies-calculator#results

# **Sustainable Design and Technology**

#### **Sustainable Cooling Technology**

Aligned's Delta Cube™ (Delta³) cooling system is purpose-built for the data center. Delta<sup>3</sup> arrays capture and remove heat, rather than pushing cold air into the data hall. This, along with hot aisle containment, absorbs heat at its source, supporting standard, high, or mixed power densities, allowing clients to scale vertically and horizontally up to 50 kW per cabinet without stranding capacity.

#### **Green Design and Construction Principles**

Aligned's vendor managed inventory (VMI) program comprises a rolling pool of dedicated inventory, combined with factory-based construction of mechanical and electrical plant modular containers, which are then deployed and delivered on site.

The ability to deploy our mechanical and electrical systems in small increments, and only when additional capacity is needed, contributes to sustainability by not stranding resources that aren't being utilized. This provides for responsible use of limited resources and reduces our customers' carbon footprint.

#### **Accurate and Efficient Digital Carbon Tracking**

Aligned is one of the first data center providers to offer transparent and accurate data of their carbon footprint via nZero, a 24/7 carbon tracking platform that measures energy, emissions, and utility information. The technology allows Aligned and its customers to better inform their sustainability strategies and greenhouse gas emissions reduction goals.

# **Sustainability Awards**

Aligned is honored to have received several awards in recognition of our adaptive and efficient data center platform, our innovative technology, and environmental stewardship:

- 2023 Sustainability Leadership Award awarded by the Business Intelligence Group
- 2023 SEAL Business Sustainable Innovation Award
- 2022 Sustainability Leadership Award from the Business Intelligence Group
- 2022 Asset-Backed/Asset-Based Green Bond of the Year award by Environmental Finance
- 2022 Environmental Leadership of the Year Award at Reuter's Responsible Business Awards
- 2022 Planet Friendly Finance Award by The Tech Capital
- 2021 Sustainability-linked Loan of the Year by Environmental Finance Business Intelligence Group
- 2021 Data Center Sustainable Champion Award from Northern Virginia Technology Council (Aligned CEO, Andrew Schaap)
- 2020 Sustainability Leadership Award by Business Intelligence Group
- 2020 Technology for Good Award by Global Good Awards
- 2020 Silver Green Lease Leader from the Institute for Market Transformation and the Better Buildings Alliance
- 2016 Data Center Energy Efficiency Project of the Year from the Global Data Center Alliance for Phoenix, AZ Data Center.
- 2016 Edison Bronze Award for technological energy advancements through its highly optimized data center heat removal cycle























# **Aligned Energy Holdings, LP**

Type of Engagement: Annual Review

Date: 18 March 2024 Engagement Team:

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#### Introduction

In 2022 and 2023, Aligned Energy Holdings, LP ("Aligned" or the "Issuer") issued green securitized notes (the "Series 2022-1 Notes" issued in November 2022, "Series 2023-1 Notes" issued in August 2023, and "Series 2023-2 Notes" issued in November 2023; collectively, the "Green Securitized Notes") to refinance¹ data centre infrastructure in the US. In 2024, Aligned engaged Sustainalytics to review the projects financed with proceeds from the Green Securitized Notes (the "Nominated Projects"), and provide an assessment as to whether the projects meet the use of proceeds criteria and the reporting commitments outlined under the Aligned Green Finance Framework (the "Framework").² Sustainalytics provided a Second-Party Opinion on the Framework in July 2021.³ This is Sustainalytics' second annual review of allocation and reporting of the instruments issued under the Framework, following a previous review in January 2023.⁴

#### **Evaluation Criteria**

Sustainalytics evaluated the Nominated Projects based on whether they:

- 1. Meet the use of proceeds and eligibility criteria defined in the Framework; and
- Reported on at least one key performance indicator (KPI) for each use of proceeds category defined in the Framework.

Table 1: Use of Proceeds Categories, Eligibility Criteria and Associated KPIs

Use of Proceeds Category	Eligibility Criteria	Key Performance Indicators
	Investments in data centers infrastructure that target the following power usage effectiveness (PUE) <sup>5</sup> requirements:	Average PUE of Eligible Green     Assets
Energy Efficiency	<ul> <li>PUE of 1.35 or below for data centers infrastructure that uses water-based cooling technologies</li> </ul>	<ul> <li>Potential GHG savings from ultraefficient data center infrastructure</li> </ul>
	<ul> <li>PUE of 1.45 or below for data center infrastructure that uses water-free cooling technologies</li> </ul>	Gallons of water saved from cooling solutions

https://aligneddc.com/wp-content/uploads/2021/12/Aligned-Green-Finance-Framework-Draft-v7-1.pdf

<sup>1 100%</sup> of the proceeds from the Green Securitized Notes were used by Aligned to refinance the eligible green assets.

<sup>&</sup>lt;sup>2</sup> Aligned, "Aligned Green Finance Framework", (2021), at:

<sup>&</sup>lt;sup>3</sup> Sustainalytics, "Second-Party Opinion, Aligned", (2021), at:

https://aligneddc.com/wp-content/uploads/2021/12/Aligned-Green-Finance-Framework-Second-Party-Opinion.pdf

<sup>&</sup>lt;sup>4</sup> Sustainalytics, "Annual Review, Aligned", (2023), at: <a href="https://mstar-sustops-cdn-mainwebsite-s3.s3.amazonaws.com/docs/default-source/spos/aligned-energy-holdings-lp-series-2021-1-notes-annual-review-letter.pdf">https://mstar-sustops-cdn-mainwebsite-s3.s3.amazonaws.com/docs/default-source/spos/aligned-energy-holdings-lp-series-2021-1-notes-annual-review-letter.pdf</a>

<sup>&</sup>lt;sup>5</sup> PUE is the ratio of facility-wide power consumption to power used by the IT equipment.

Science Direct, 'Power usage effectiveness in data centers: overload and underachieving', May 2016, at:

https://www.sciencedirect.com/science/article/pii/S1040619016300446

## Issuer's Responsibility

Aligned is responsible for providing accurate information and documentation relating to the details of the funded projects, including descriptions of projects, amounts allocated and project impact.

### **Independence and Quality Control**

Sustainalytics, a leading provider of ESG research and ratings, conducted the verification of the use of proceeds from Aligned's Green Securitized Notes. The work undertaken as part of this engagement included collection of documentation from Aligned and review of said documentation to assess conformance with the Framework.

Sustainalytics relied on the information and the facts presented by Aligned. Sustainalytics is not responsible, nor shall it be held liable for any inaccuracies in the opinions, findings or conclusions herein due to incorrect or incomplete data provided by Aligned.

Sustainalytics made all efforts to ensure the highest quality and rigor during its assessment process and enlisted its Sustainability Bonds Review Committee to provide oversight of the review.

#### Conclusion

Based on the limited assurance procedures conducted,<sup>6</sup> nothing has come to Sustainalytics' attention that causes us to believe that, in all material respects, the reviewed projects do not conform with the use of proceeds criteria and reporting commitments in the Framework. Aligned has disclosed to Sustainalytics that the proceeds from the Green Securitized Notes were fully allocated as of December 2023.

## **Detailed Findings**

**Table 2: Detailed Findings** 

Framework Requirements	Procedure Performed	Factual Findings	Error or Exceptions Identified
Use of Proceeds Criteria	Verification of the Nominated Projects to determine alignment with the use of proceeds criteria outlined in the Framework.	All projects reviewed complied with the use of proceeds criteria.	None
Reporting Criteria	Verification of the Nominated Projects to determine if impact was reported in line with the KPIs outlined in the Framework.	All projects reviewed reported on at least one KPI per use of proceeds category.	None

<sup>&</sup>lt;sup>6</sup> Sustainalytics' limited assurance process includes reviewing documentation relating to details of projects, as provided by the issuing entity, which is responsible for providing accurate information. These may include descriptions of projects, estimated and realized costs, and reported impact. Sustainalytics has not conducted on-site visits to projects.

# **Appendices**

# **Appendix 1: Allocation Reporting**

The Issuer raised USD 1,240 million as net proceeds from the issuance of the Green Securitized Notes, that were fully allocated in accordance with the use of proceeds criteria noted in the Framework to refinance water-based data centers in Salt Lake City (UT), Ashburn (VA) and Northlake (IL) with a design PUE of 1.35, 1.35 and 1.45 respectively.

**Table 3: Net Proceeds Allocation by Tranche of Notes** 

Use of Proceeds Category	Green Securitized Notes	Net Proceeds Allocation (USD million)
	Series 2022-1 Notes (Class A-2 Term Notes)	400
Energy Efficiency	Series 2023-1 Notes (Class A-2 Term Notes)	540
	Series 2023-2 Notes (Class A-2 Term Notes)	300
Total (USD million)		1,240

# **Appendix 2: Reported Impact**

**Table 4: Key Performance Indicators** 

Use of Proceeds Category	Environmental Impact Metrics	KPI (Annual Estimated Savings)
	Energy savings due to low design PUEs <sup>7</sup>	125,256 MWh
Energy	Scope 2 greenhouse gas emissions avoided due to low design PUE <sup>8</sup>	39,681 mtCO₂e
Efficiency	Scope 2 greenhouse gas emissions avoided due to 100% of energy consumption matched with renewable energy sources	74,313 mtCO₂e

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<sup>&</sup>lt;sup>7</sup> Davis, J., Donnellan, D., Simon, L., Smolaks, M., Lawrence, A., and Bizo, D. (2022, September 14). Uptime Institute Global Data Center Survey Results 2022. Uptime Institute, at: <a href="https://uptimeinstitute.com/resources/research-and-reports/uptime-institute-global-data-center-survey-results-2022">https://uptimeinstitute.com/resources/research-and-reports/uptime-institute-global-data-center-survey-results-2022</a>
<sup>8</sup> Ibid.

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Sustainalytics, a Morningstar Company, is a leading ESG research, ratings and data firm that supports investors around the world with the development and implementation of responsible investment strategies. For more than 30 years, the firm has been at the forefront of developing high-quality, innovative solutions to meet the evolving needs of global investors. Today, Sustainalytics works with hundreds of the world's leading asset managers and pension funds who incorporate ESG and corporate governance information and assessments into their investment processes. Sustainalytics also works with hundreds of companies and their financial intermediaries to help them consider sustainability in policies, practices and capital projects. With 17 offices globally, Sustainalytics has more than 1500 staff members, including more than 500 analysts with varied multidisciplinary expertise across more than 40 industry groups.

For more information, visit www.sustainalytics.com

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