



# BSAI Private Equity Bain and Aquila: Expanding ESG-Driven Investments

Giacomo Evangelisti  
Riccardo Mosca  
Matthew Walzer  
Moritz Luther



## Introduction to Aquila and Bain Capital

The Aquila Group is a private investment company headquartered in Hamburg, Germany. Aquila has over EUR 25bn in transactions and assets under management of EUR 15bn. They have made a commitment to avoid 1.5 billion tonnes of CO2 by 2035. To this end, they have a diversified portfolio of companies focusing on innovative solutions in various sectors. Aquila has a particular investment focus on clean energy and sustainable infrastructure. The portfolio includes investment management, industrial clean energy development and independent power production across Europe and Asia Pacific, as well as projects in data centers, green logistics and Spanish residential real estate.

Bain Capital is an American private investment company based in Boston, Massachusetts. The firm was founded in 1984 by a group of former Bain & Company consultants, but has no affiliation with Bain & Company whatsoever. Bain Capital has approximately 175 billion euros worth of assets under management, and invests in nearly every type of alternative available. In private equity specifically, Bain Capital has invested in over 940 different companies, with a particular focus on companies that meet ESG criteria in recent years. This acquisition of AQ Compute thus aligns with Bain Capital's dedication to environmental responsibility.

## Industry Overview

On the 31st of October 2024, Bain Capital agreed to acquire an 80% stake in private investment firm Aquila Group's data centre subsidiary AQ Compute.

AQ Compute was established with the mission of delivering green, flexible, and modular data center and colocation services. Its primary goal is to meet the rising demand for data centers while prioritizing sustainability by developing AI-ready, net-zero emission facilities powered by renewable energy. AQ Compute leverages the expertise and backing of its partners: Bain Capital and its parent company Aquila Group, a global leader in sustainable investment and infrastructure development.

What is a data center? And what is a sustainable data center? A data center is a physical facility that organizations rely on to store their essential applications and data. Its design is built around a network of computing and storage resources that support the delivery of shared data and applications. A sustainable data center is a facility designed to house IT infrastructure while utilizing energy-efficient technologies. Its purpose is to optimize energy consumption and reduce environmental impact. Examples include advanced cooling systems, the utilization of waste heat, practices focused on reuse and recycling, and efficient management of data center infrastructure.

## Market Figures on Data Centers and Sustainable Data Centers

Between 2019 and 2023, the data center market experienced robust growth, achieving a 12.70% CAGR. Growth during this period accelerated due to the COVID-19 pandemic, which drove organizations toward digital transformation. Nearly every organization transitioned to remote work, creating a need for rapid deployment of cloud computing to manage large volumes of data. This shift has had a positive impact on the market outlook. According to Future Market Insights, the data center market is estimated to stand at USD 30.41 billion in 2024. The market is forecasted to exceed a valuation of USD 117.24 billion by 2034, recording a CAGR of 14.40%. Data center demand is primarily driven by the exponential upsurge in data consumption and data generation by organizations across multiple industries.



Attributes	Values
Estimated Market Size (2024)	USD 30.41 billion
Forecasted Market Size (2034)	USD 117.24 billion
Projected Value CAGR ('24-'34)	14.40%

Currently, AQ compute is operating solely in Europe and is proposing expansions within the European Market. According to Business Wire, The Europe Sustainable Data Center Market was valued at USD 8.88 billion in 2023, and is expected to reach USD 16.89 billion by 2029, rising at a CAGR of 11.31%.

Attributes	Values
Estimated Market Size (2024)	USD 8.8 billion
Forecasted Market Size (2029)	USD 16.89 billion
Projected Value CAGR ('24-'29)	13.71%

## Industry Regulatory Landscape

On June 6, 2024, Delegated Regulation (EU) 2024/1364, adopted by the European Commission, came into effect. Its goal is to establish a sustainability rating system for data centers across the European Union. This regulation marks a significant step toward creating uniform standards for evaluating and enhancing the energy efficiency of data centers, which are vital to managing digital infrastructure. Under this regulation, data center operators with IT energy consumption of at least 500 kW are required to regularly report key performance indicators. The data submitted to the European database will be used to evaluate the environmental impact of these facilities and to foster a unified approach to sustainability within the industry. Given AQ Compute's strong presence in the European Market, we believe the introduction of such regulation was a big player in determining Bain Capital's decision to acquire AQ Compute.

## Deal Structure

Bain Capital's acquisition of AQ Compute represents a well-structured partnership, aimed at expanding sustainable data center operations across Europe. Bain Capital obtained an 80% majority stake in the transaction, earning the power to exert operational control and implement its growth prospects. Aquila Group retained a 20% minority share, guaranteeing the maintenance of a significant influence over AQ Compute's strategic alignment with its renewable energy initiatives. This lower stake embodies Aquila's continuous fight to integrate clean energy solutions into data center infrastructure, while counting on the honed technical expertise of its new partner.

The financial structure of the deal symbolizes its ambitious objective. Bain Capital assigned the majority of the investment to a multi-billion-euro development plan, with the purpose of scaling AQ

Compute's footprint in key European markets, namely Oslo, Barcelona, and Milan. Simultaneously, Aquila Group co-investment accounted for hundreds million euros, strengthening the collaborative nature of the deal. This infusion of capital will be destined to fund the development of AI-ready, modular data centers mostly powered by renewable energy, which address the growing demand for computing and data sovereignty across Europe.

The deal's governance has been constructed to balance the operational expertise of Bain Capital with the sustainability-focused philosophy of Aquila Group. In particular, its retained stake includes board representation, which ensures supervision and alignment with long-term ESG objectives. Possible synergies between the two parties are crucial to the partnership; Bain Capital brings consolidated knowledge in scaling infrastructure globally, while Aquila enhances the green profile of the venture via its renewable energy capabilities.

The unique mechanisms underlying this deal represent an innovative approach to private equity, which successfully combines financial leverage, operational expertise, and sustainability governance, symbolising the increasing relevance of ESG principles in the alternative investments' industry, and more specifically in infrastructure sectors undergoing rapid growth.

## Implications for Aquila and Bain Capital

Aquila hopes that the partnership with Bain Capital will expand AQ Compute's capabilities and cement its role as a key player in Europe's digital infrastructure. Aquila will also invest several hundred million euros alongside Bain Capital's larger commitment. With the remaining 20 per cent stake, Aquila wants to ensure that AQ Compute's growth is in line with its long-term vision for sustainable infrastructure. Aquila also hopes to realize synergies with Aquila Clean Energy, a developer and independent power producer in the clean energy sector.

The key implications of this acquisition for Bain Capital are firstly a key expansion into the data science sector, aligning with the growing demand for energy-efficient infrastructure in tech. Bain Capital has the intellectual and financial resources to assist greatly in the acceleration of AQ Compute's European growth plans, with projects for sustainable data centers planned in Barcelona and Milan, in addition to the already functioning one in Oslo. With this acquisition, Bain Capital positions itself as a leader in the European data center market, especially catering to hyperscale and AI applications, both rapidly growing customer bases. This acquisition certainly has the potential for significant returns, with Bain Capital using it to expand its footprint in sustainable data, capitalize on growing tech demand, and hold true to their ESG criteria.

## Conclusion

The purchase of an 80% share in AQ Compute by Bain Capital represents a critical turning point in the development of environmentally friendly data centre infrastructure throughout Europe. This collaboration highlights the growing importance of ESG principles in the world of alternative investments and demonstrates the developing synergy between financial investing and environmental sustainability. Bain Capital's strong financial backing and operational know-how allow AQ Compute to quickly expand its presence in important European cities including Milan, Barcelona, and Oslo. In the meantime, Aquila Group maintains a 20% ownership share, guaranteeing that AQ Compute stays true to its objective of creating AI-ready, net-zero emission facilities that are fuelled by renewable energy.

Aquila's emphasis on sustainability and Bain Capital's growth goals are strategically aligned, highlighting a progressive approach to infrastructure development. Through this acquisition, Bain Capital positions itself a global leader in the rapidly expanding data centre sector, which takes advantage of the growing need for AI-driven, energy-efficient solutions. The collaboration will strengthen Aquila's long-term goal of sustainable infrastructure while utilizing Bain Capital's extensive worldwide network to increase its influence.

## Bibliography

1. Cisco. "What Is a Data Center?" Cisco. Accessed December 3, 2024. <https://cisco.com/c/en/us/solutions/data-center-virtualization/what-is-a-data-center.html>.
2. Private Equity Wire. "Bain Capital Acquires Majority Stake in Aquila's Data Centre Business AQ Compute." Private Equity Wire. Accessed December 3, 2024. <https://www.privateequitywire.co.uk/bain-capital-acquires-majority-stake-in-aquilas-data-centre-business-aq-compute/>.
3. Bain Capital. "Bain Capital and Aquila Group Partner to Build Leading Sustainable Data Center Platform across Europe." Bain Capital. Accessed December 3, 2024. <https://www.baincapital.com/news/bain-capital-and-aquila-group-partner-build-leading-sustainable-data-center-platform-across>.
4. AQ Compute. "AQ Compute – Green Modular Data Centers." AQ Compute. Accessed December 3, 2024. <https://aq-compute.com/>.
5. True Zero Tech. "Sustainable Data Centres: The Future of Green Technology." True Zero Tech. Accessed December 3, 2024. <https://www.truezero.tech/sustainable-data-centres#:~:text=E%2DWaste%20Reduction%3A%20Sustainable%20data,and%20minimising%20its%20environmental%20impact>.