

Buildings
Simply Made
Better

aedifion



Gold Standard in Terms of Energy Efficiency and Comfort

Case Study: SPRINGER QUARTIER, Hamburg

Gross floor area: 60 000 m² | Year built: 1956 & 2021 | Building type: Mixed Use |

Owner: MOMENI Group

SPRINGER QUARTIER, developed by the MOMENI Group, stands as a flagship project in Hamburg's urban quarter landscape, seamlessly linking the city center with the Gängeviertel and Neustadt districts. The property offers an enticing mix of office, retail, and restaurant spaces, complemented by contemporary apartments that meet the latest energy standards. As one of Hamburg's most extensive inner-city developments, the seamless integration of the protected historic Springer high-rise and the adjacent new-build complex effortlessly caters to the demand for high-quality mixed-use properties in a prime location.



43 828 €

annual operation cost savings
(1.09 €/m²/a)



339 MWh

annual energy savings
(8.44 kWh/m²/a)



91.7 t CO₂

annual avoided emissions
(2.28 kg /m²/a)

Task

aedifion was commissioned to identify potential savings in both the protected historical high-rise and the adjacent new-build complex of SPRINGER QUARTIER to ensure energy efficient operation and optimum indoor air comfort for tenants, while minimizing ancillary costs.

Measures

1. Real-time data collection: SPRINGER QUARTIER's securely encrypted data provides the foundation for effective operational optimization. Continuously transferred to the aedifion cloud platform, it remains readily accessible to the operations team and asset management, ensuring transparent monitoring of building operations.

2. Identification of savings potential: The intelligent software performs continuous and automatic analysis of the building's operations. This allows inefficiencies to be quickly identified and corrected from the outset. As part of its full-service package, aedifion helps to implement the recommendations by holding regular workshops with the operations team.

3. Autonomous optimization: Since July 2023, the self-learning technology autonomously controls the building's heating circuits. In addition to technical operating data, predictive control takes into account external factors such as weather forecasts and outside temperatures, ensuring a comprehensive approach to optimization.

Achievements

A key strategy for improving energy efficiency was to optimize the air handling units in the offices. By adjusting operating times to match demand, savings of around EUR 22 000 per year have been achieved, while improving the comfort in the building. Adjusting the supply air set points in the technical rooms has resulted in additional savings of approximately EUR 13 000 per year. Another notable achievement was the refinement of the general night-time set-back of heating circuits in the buildings. Together with

Solution

Since the start of the project in July 2022, continuous data collection in the cloud platform has enabled transparent, real-time analysis and optimization of the buildings' operation. The intelligent software continuously identifies potential savings and, since July 2023, autonomously controls the heating circuits based on predictive control.

their automated and predictive control based on weather forecasts, this is expected to deliver additional savings in the future. In addition, the correction of faulty outdoor temperature sensors has further improved the safety and accuracy of the systems technology.

Summary and Outlook

After approximately one year, the SPRINGER QUARTIER is emerging as a pioneering prestige property that sets benchmarks not only in architecture but also in technology. The aedifion cloud platform ensures the highest levels of system security and energy efficiency. At the same time, the reduction of operating costs and the improvement of tenant comfort enhance the long-term value of the property. Future initiatives are underway to extend autonomous control to ventilation systems and to control individual room temperatures.

Customer Feedback

"The SPRINGER QUARTIER project has demonstrated the remarkable effectiveness of aedifion's software solution, with outstanding results in both new and existing buildings. Our tenants have high expectations for energy and cost efficiency as well as comfort. With aedifion as a trusted partner, we can meet these expectations and create sustainable value within the building."

Marco Jessen, MRICS

Associate Director | Head of Real Estate
Management | MOMENI Group

