Buildings
Simply Made
Better

aedifion

Digital Building Intelligence for People and the Planet

Case Study: Westgate, Cologne

Gross floor area: 21 123 m² | Year built: 2010 | Building type: Office and commercial building

Owner: MEAG MUNICH ERGO AssetManagement GmbH

In the heart of Cologne, "Westgate" – a seven-story landmark – is setting new standards for futureproof commercial real estate. Owner MEAG MUNICH ERGO AssetManagement GmbH combines modern office, retail, and hospitality uses, while demonstrating the value of sustainability criteria in real estate at the same time. During ongoing operations, the aedifion cloud platform supports continuous optimization of energy consumption and indoor air quality, bringing together sustainability considerations, digitalization, and economic efficiency into a cohesive overall concept.

15 %

reduction in operating costs*

(€57 800 annual realized potential for operating cost savings)

15 %

reduction in energy consumption*

(231 200 kWh annual realized potential for energy savings)

11 %

reduction in CO_2 emissions*

(55 metric tons annual realized potential for emission savings)

*Values based on annual projections, in relation to actual annual consumption data from 2023.

Starting Situation and Objectives

aedifion was tasked with establishing total transparency over building operations using its AI-based software, detecting malfunctions in technical systems at an early stage, and measurably improving energy efficiency, operating costs, and emissions. At the same time, the indoor climate in shops and offices was to remain continuously within the comfort zone due to comfort monitoring and demand-responsive control – ensuring productive, healthy working conditions.

Project Implementation

1. Connectivity and Database: Secure, manufacturer-independent plug-and-play connection of the cloud platform to the technical building equipment (TBE), structuring as digital twins, and preparation for analyses and visualizations.

2. AI-Supported Analysis and Optimization of Operations: AI-based identification of savings potential and recommended action, as well as supported implementation during ongoing operations – in close coordination with property and facility management and the building automation contractor, including:

Ventilation systems in offices and restrooms: Adjustment of switch-on times to actual usage for measurable electricity savings.

Heating systems in shops, side rooms, and air curtains: Adjustment of temperature limits for earlier heating breaks at higher outdoor temperatures and overall more efficient operation without any loss of comfort.

aedifion's AI-based solution now proactively identifies inefficiencies and ensures stable energy efficiency and optimum indoor air comfort. Due to the continuously expanded database (room automation, additional meters / sensors), remaining "blind spots" can be continuously eliminated, steadily increasing the building's optimization level.

Conclusion and Outlook

With digital optimization of operations by aedifion, Westgate is strengthening its role as a showcase for digital, energy-efficient, and comfort-focused commercial buildings. Predictive AI control with weather-based automation and holiday shutdowns is currently being implemented and should enable further savings in the future.

On average, a birch tree absorbs around 12.5 kg of CO_2 per year. To offset 55 tons of CO_2 annually, as in the Westgate project, approximately

4 400 trees

would need to be planted.

Source: co2online.de

Customer Feedback

"aedifion convinced us with its full-service package for optimizing Westgate's operations. Dedicated contacts and competent support from data analysis to implementation – that's exactly how building digitalization should be handled!"

Marc Schäfer

Technical Property Management Team Leader | MEAG MUNICH ERGO AssetManagement GmbH