Buildings
Simply Made
Better

aedifion



AI-Based Decarbonization Across the Entire Portfolio

Case Study: Portfolio-Rollout AEW Invest

Properties: 58 | Construction years: 1970-2020 | Type: Office, Retail, Residential |

Gross floor area: approx. 450 000 m²

As one of the world's leading real estate investment and asset managers, AEW manages assets worth € 79.1 billion and, with its Socially Responsible Investment (SRI) principles, is a pioneer in responsible investment policy. In addition to comprehensive social and governance principles, the main focus is on reducing energy consumption and CO_2 emissions across the entire portfolio.

20 %

average annual savings in energy, CO_2 and operating costs in already optimized buildings

Success Factors

- Comprehensive data collection and analysis
- Easy scalability across the entire portfolio
- Regular coordination with asset, facility, and property management to ensure an optimal balance between energy efficiency and economic performance

Objective

Using a selected portfolio from AEW, the company's sustainability goals are to be achieved even more effectively through AI-based operational optimization with the aedifion Cloud Platform. The goal is to avoid excessive energy consumption through a holistic solution and to offer tenants a pleasant indoor climate with lower ancillary costs. The collected data raise user awareness for energy-efficient operation and support the evaluation of further investments in decarbonization measures.

Project Process

The rollout started in winter 2021 with a successful pilot project at ONE COLOGNE in Cologne. Since then, a portfolio analysis has been used to determine the level of digitalization of the remaining buildings through questionnaires and targeted on-site inspections, and an individual approach is defined for each property in consultation with the owner. Buildings that already have digital communication interfaces can be connected to the Cloud Platform via plug-and-play. Older buildings are first retrofitted with appropriate hardware and then gradually connected.

The system data is then sent to the cloud and can be easily analyzed and controlled via the user interface. An energy and CO_2 matrix shows which buildings achieve savings and where there is potential for improvement. AI-based analyses provide recommendations for improving system efficiency. For pragmatic and rapid support in day-to-day operations, control is ultimately carried out autonomously by self-learning algorithms.

Significant energy, CO_2 and cost savings even in modern buildings.

Compliance with german requirements for efficient system operation in accordance with § 56 (1), (2), (3) of the German Building Modernization Act (GModG).

Reduced ancillary costs with optimal indoor air comfort for tenants.

All key building performance indicators at a glance.

Customer Feedback

"Our real estate portfolio is highly diversified and includes different asset classes, tenant structures, and levels of digitalization. With aedifion, we have a reliable partner to increase the energy efficiency of our assets and extend it to additional buildings. The first projects have already been implemented very successfully. We are now continuing to drive integration across our portfolio."

Christina Ofschonka
CIO | Head of Germany & CEE |
AEW Invest GmbH

