



TRANE®

Kieback&Peter

BUILDING & ENERGY MANAGEMENT SYSTEMS

Smarter Buildings. Lower Energy Use. Better Outcomes.



Why Integrated Building and Energy Management?

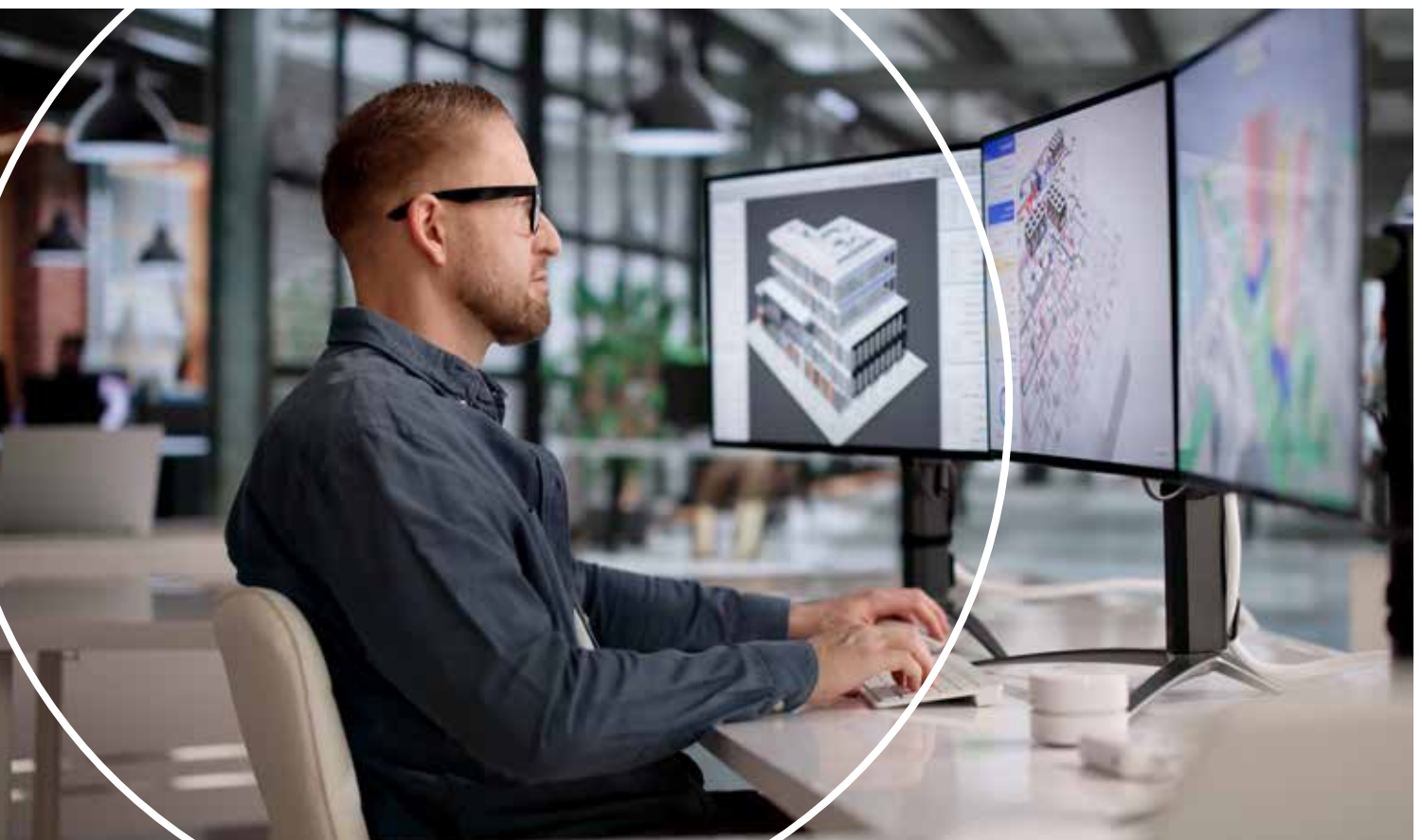
Transform Your Facilities for Peak Performance

Today's buildings face growing pressure from every direction. Occupants expect healthy, comfortable indoor environments. Operators need more visibility and control. Organizations are working to reduce energy costs and embed AI to optimize efficiency and achieve sustainability commitments. All this while managing increasingly complex systems with limited resources.

Achieving those outcomes requires more than stand-alone controls. It demands an integrated, strategic approach across your entire building ecosystem. An integrated building and energy management strategy helps bring systems together—so facilities can operate more efficiently, respond more intelligently, and support better business outcomes.

With the right integration, you benefit from

- Reduced energy use and lower costs
- Better comfort and productivity for occupants
- Simplified operations with actionable insights
- Enabled digital transformation and AI-readiness



Our Solution

Two Industry Leaders. One Connected Vision.

Our building ecosystem management capabilities help you create smarter, more efficient environments that are easier to manage and strengthen performance. Delivering better building performance takes more than standalone products. It requires connected expertise across HVAC, controls, automation, and energy management.

We combine the expertise of two industry leaders:

- **Trane:** A global provider of heating, cooling and ventilation equipment, controls and services, maximizing performance, efficiency, and reliability.
- **Kieback&Peter:** A pioneer in room and building automation, integrating HVAC, lighting, fire safety, and other systems onto a unified platform.

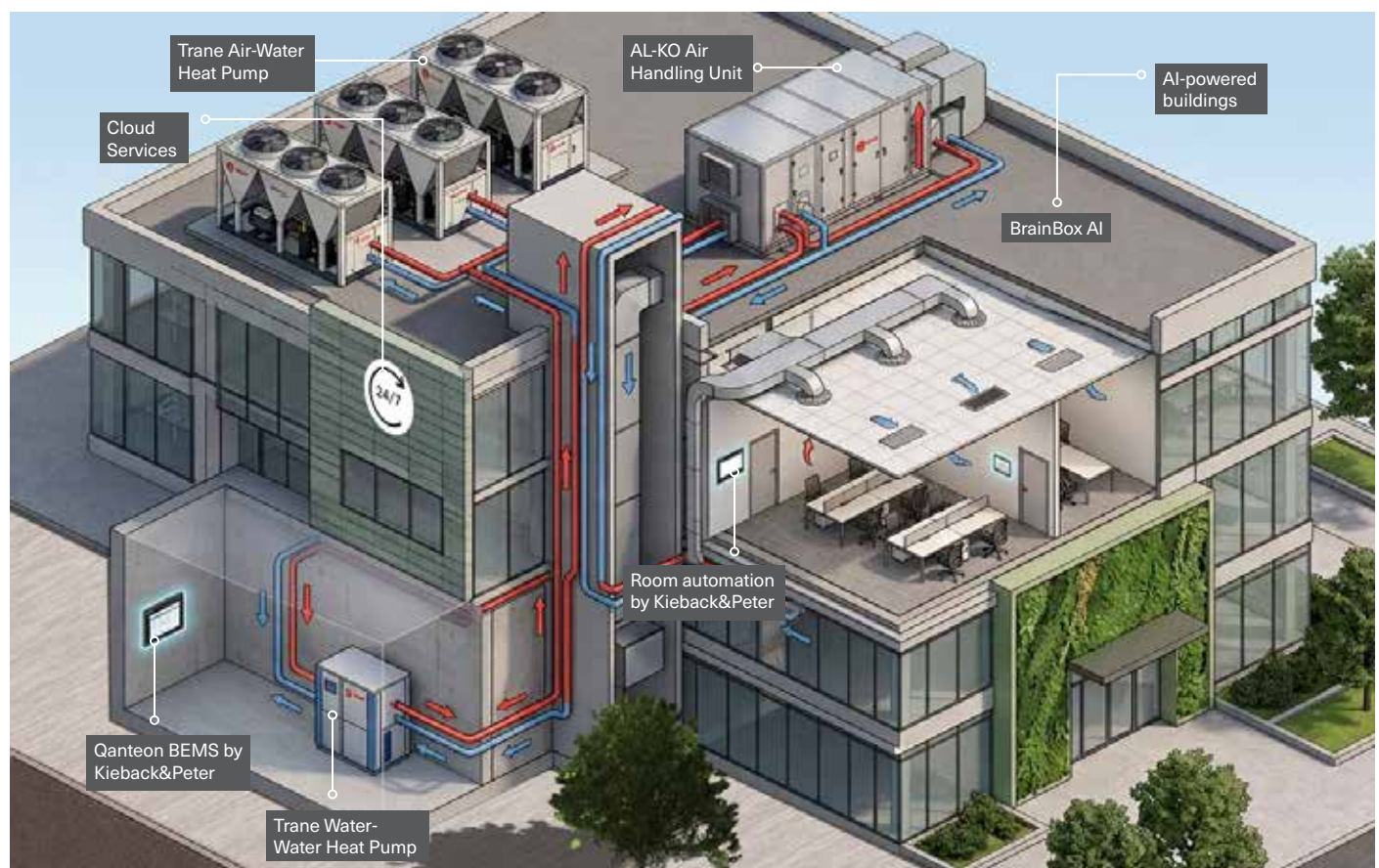
Together, our portfolio enables high-performing smart buildings, delivering efficiency and automation at every level: from an equipment plant room to a complex multi-site infrastructure.

What our combined Trane and Kieback&Peter approach delivers:

- Market-leading HVAC equipment, controls and services
- High-quality and customizable hardware and software
- Scalable controls architecture across HVAC, lighting and security functions
- A stronger foundation for continuous efficiency improvement

ONE INTEGRATED ECOSYSTEM:

Turning building technology into an optimum holistic system



This image was generated using AI and may contain inaccuracies.

Tailored Solutions. Measurable Results.

Achieve More with Smart, Integrated Control

No two buildings operate alike. Different facilities have unique occupancy patterns, operational challenges, infrastructure constraints, and performance goals. That's why an integrated building management strategy should be designed around outcomes—not just equipment.

Deliver the Results That Matter



Increase Comfort and Productivity

Smart automation continuously adjusts HVAC and building system performance in real time to support industrial processes and indoor environments.



Lower Energy Use and Operating Costs

Data-driven controls identify efficiency opportunities, cut waste, and improve overall system performance.



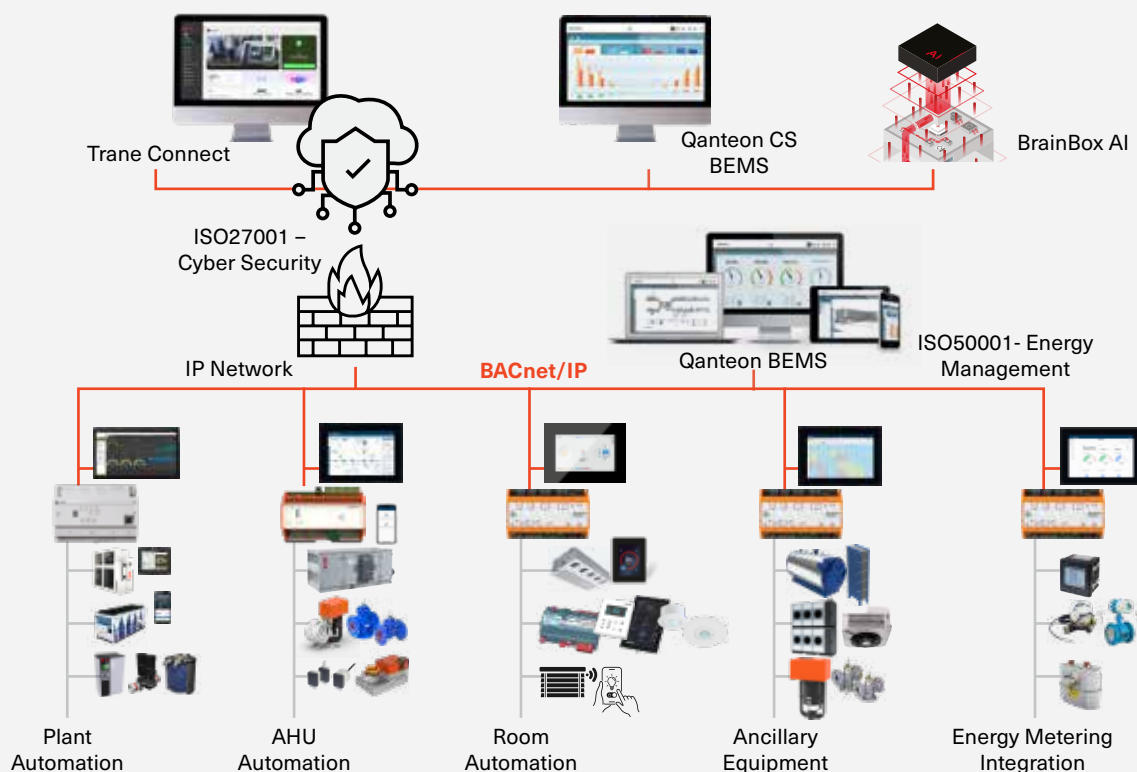
Enhance Security and Compliance

Built-in cybersecurity, standards-based controls, and ISO 27001-certified solutions protect operations and support compliance requirements.

A complete portfolio of HVAC equipment and controls for every building:

Accelerate your automation journey with expert support—from initial integration to long-term controls optimization and service upgrades. Whether you oversee a single facility or a complex portfolio, we deliver control solutions tailored to your needs.

System Architecture Overview



HVAC Plant Control

Optimize Plant Performance with Greater Confidence

Heating and cooling equipment is at the heart of your facility's operations. Trane embeds the latest technology in its products – but that isn't enough to guarantee a high performing building. Without smart controls and automation, energy is wasted and operations aren't as efficient and reliable as they can be.

As an equipment manufacturer and thermal systems expert, Trane engineers HVAC Plant Control solutions that transform plant operations by improving coordination, visibility, and system-wide performance in commercial and industrial environments.

Why Choose Trane Plant Control?

- Enhanced system-wide efficiency and reliability.
- Greater visibility into plant status and trends—on-site or remotely.
- Improved longevity of plant assets.
- Consistent peak operating performance, day after day.
- Support for proactive operational decisions with real-time data.

Trane is your OEM and single-source partner across the entire plant lifecycle. From equipment and field devices to controllers and software, every layer of the solution is designed and manufactured by Trane to help ensure compatibility, quality, and seamless performance. With one trusted partner supporting your plant infrastructure, you benefit from greater consistency, simpler coordination, and a lifecycle strategy that optimizes performance from design and installation through daily operation and long-term service.

Trane plant control key solutions

Symbio® Equipment Controllers

Flexible, intelligent controls for packaged units, heat pumps, chillers, and multi-pipe units. Designed for peak equipment performance, minimum energy use, and streamlined modernization.

- **Adaptive Controls™ feature:**
Control algorithms designed to keep equipment running during rapidly changing, challenging operating conditions.
- **User-friendly experience:**
Touch color display for real-time unit status, check system performance, and adjust setpoints. Secure access to monitor and manage equipment via web browser or mobile app.
- **Simple integration and service:**
Open protocols, intuitive interfaces, and non-proprietary tools for rapid upgrades and maintenance.
- **Secure and future-ready:**
Designed to comply with applicable cybersecurity standards and adapt to evolving IT best practices.



Tracer® SC+ Plant Controller

Centralized plant automation for Trane and non-Trane equipment, designed to enhance building-wide efficiency and optimize system performance.



Advanced Optimization Capabilities

- Efficient unit sequencing
- Free cooling and/or heat recovery integration
- Hybrid system optimization for minimum total plant energy
- Heating and cooling set point reset
- Pump pressure optimization



Building & Energy Management

Unified Building Automation, Designed for Flexibility

Smart building performance extends beyond the HVAC plant. Room-level control, automation logic, and system integration all play an important role in enhancing comfort, usability, and efficiency from top to bottom.

Kieback&Peter solutions bring cohesion to every layer—from HVAC and lighting to fire safety and beyond.

Key offerings

Integrated Room Automation

- Flexible automation for single spaces, zones, or multi-room setups
- Time schedules, occupancy detection, scenario logic, and partitioning adapt comfort to real needs.

Room Controllers

Kieback&Peter wide range of room controllers are designed for rapid installation and operation for any room type.

- **Basic controllers:**
A flexible solution for standard room control applications.
- **Advanced controllers:**
Premium solution to ensure smart coordination between HVAC, lighting, and sun protection.



Room Thermostats, Displays, Sensors, Valves, and Actuators

Our complete room unit and field device solutions improve comfort, save energy and support easy operation—ideal for any environment.

Top Features

- Demand-driven automation for temperature, CO₂, humidity, light, and solar protection
- Stable, comfortable indoor conditions with dynamic adjustment
- Seamless integration—stand-alone or connected to sitewide BEMS

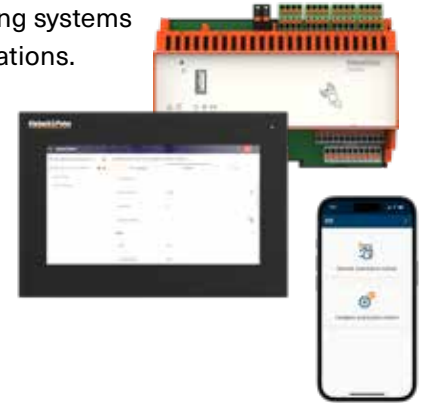


AHU Automation

Kieback&Peter's Advanced DDC automation solutions are suitable for air handling systems of all sizes, with a large library of pre-engineered macros for various AHU applications.

DDC Highlights

- Built-in modes for optimized comfort and energy use
- Speedy, standardized deployment and reduced long-term costs



Qanteon

All-in-One Building & Energy Management Platform

Qanteon unifies **Building Management System (BMS)** and **Energy Management System (EMS)**, integrating controls, dashboards, and analytics on a single platform for better results and effortless compliance.

How Qanteon makes a difference

- Centralizes command—across all building systems
- Connects equipment, sensors, software for actionable insights and real-time tracking
- Customizes dashboards for every stakeholder, from owners to IT managers

Building Management

Qanteon provides **intelligent building management with BACnet Advanced Operator Workstation capabilities** in one intuitive interface. **Kieback&Peter was the first company to offer software certified** through BACnet Testing Laboratories (BTL 1.20) and compliant with BACnet DIN EN ISO 16484-5, supporting trusted interoperability.



Energy Management

Qanteon transforms **real-time energy data into actionable insights** that help reduce costs, improve efficiency, and strengthen building performance. With an **ISO 50001-certified** energy management system built in, Qanteon supports a more strategic, data-led approach to energy management.

BEMS solutions certified with current and future ISO regulations

ISO 9001



QUALITY MANAGEMENT
CERTIFICATE

ISO 14001



ENVIRONMENTAL
MANAGEMENT
CERTIFICATE

ISO 27001



INFORMATION SECURITY
CERTIFICATE

ISO 50001



ENERGY MANAGEMENT
CERTIFICATE

Benefits of Building Energy Management Systems



Reduced energy consumption



Improved air quality and comfort



Immediate utility savings



Lower operating and maintenance costs



Proactive equipment maintenance



**Lower emissions
and ESG goals support**

Digital Services and AI Control

Optimize your building's energy usage with digital intelligence

Our connected services and AI-enabled optimization empower you to go beyond reactive management—enabling predictive, proactive, and autonomous building operations.

Cloud services

Secure cloud connectivity for smarter collaboration and remote insight.

Trane and Kieback&Peter offer **software-as-a-service solutions** that provide authorized users secure access to cloud-based building information and services.



Key Features

- **Protected data and system integrity:** Built using modern cloud practices and security-focused design principles.
- **Controlled Access:** Helps ensure that only authorized users can access connected systems and data.
- **IT Alignment:** Supports coordination with customer IT teams to meet security requirements and governance expectations.

AI Control

Predictive, autonomous optimization for next-generation building performance.

AI Control, powered by BrainBox AI, delivers **autonomous building optimization** across one or multiple sites by seamlessly integrating with **Kieback&Peter Qanteon** and **Trane Tracer SC+ controls**.

Key Customer Outcomes



- **Cut costs, not comfort:** Reduce HVAC energy consumption by up to 25% while maintaining occupant comfort.



- **Reach carbon goals faster:** Reduce building carbon footprint by up to 40% through continuous 24/7 optimization.



- **Automate savings:** Integrated with Tracer SC+, AI Control predicts needs and makes intelligent adjustments with minimal manual intervention.



- **Transform Service & Support:** Predictive insights, guided diagnostics, and recommendations enable faster troubleshooting, improved uptime, and lower cost of ownership

Cooling

CO₂ concentration

Building data

Ventilation

Heating

Energy Consumption

Room temperature

Occupancy level

Unitlity tariff structures

Input of Data Flows

(Event)
Calendar

Wind, Cloud cover

Outdoor temperatures
& Weather predictions

BrainBox AI

Automatically learns system
and building behaviour

24/7

AI
LEARN

AI
PREDICT

ALGORITHMS
COMPARE

ALGORITHMS
ACT

Predictive Control

Every **5** minutes
control updates

What to expect

REDUCE HVAC Energy Cost

Up to 25%

REDUCE Carbon Emissions

Up to 40%

EXTEND Equipment Service Life

Up to 50%

IMPROVE Occupant Comfort

Up to 60%

Lifecycle Services

Support and partnership for every stage of your building's lifecycle

Ongoing building performance takes more than just technology—it's about expertise, partnership, and long-term support. Thanks to Trane and Kieback&Peter's extensive direct network, you gain a dedicated team at your side from planning to continuous optimization.

Whether supporting industrial facilities, healthcare environments, or public sector buildings, our strong EMEA-wide network of experienced engineers, technicians and remote digital support simplify your operational journey and deliver sustained building value.

Our lifecycle services



Consultation and project planning

Tailored support for HVAC/Building Energy System (BES) integration and energy performance goals



Expert Project Delivery

Seamless installation, commissioning, and on site training



Operation & Optimization

Remote monitoring, analytics, integration services, maintenance and upgrades, and training center access



Connected Mechanical Service Agreements (CMSA)

Comprehensive digital HVAC Service with CMSA delivers continuous data and performance insights with remote support from your trusted OEM technician.



24/7 Data Collection

Gain real-time operational insights and early detection of trends with around-the-clock data and analytics from your HVAC systems.



Performance Report

In-depth, easy-to-understand reports help you track equipment performance against original design specs and highlight opportunities for optimization.



Remote Troubleshooting Support

OEM experts can diagnose, identify, and solve many issues remotely, ensuring faster resolution and less downtime.

Real buildings. Real results.

La Poste du Louvre, Paris

REIMAGINED FOR MODERN PERFORMANCE



THE COMPANY AND THE CHALLENGE

A landmark restoration transformed one of Paris's most iconic buildings into a premium mixed-use destination — uniting heritage preservation, intelligent building control, and exceptional sustainability performance.

In the heart of Paris, La Poste du Louvre offered a rare opportunity to reinvent a historic landmark while honoring its architectural character. Reimagined as a dynamic mixed-use destination, the redevelopment brings together retail, offices, apartments, a five-star hotel, a daycare center, and postal services within one exceptional address.

THE SOLUTION

Delivering this vision required a thoughtful balance of heritage preservation and modern building performance across approximately 32,000 m². **The Kieback&Peter team implemented an intelligent automation solution that integrates HVAC, lighting, and shading into one centralized platform, enabling seamless coordination across the entire property**

THE RESULTS

The result is a **refined, high-performing environment that enhances occupant comfort, improves operational visibility, and supports long-term energy efficiency**. With advanced monitoring and recognized sustainability credentials, La Poste du Louvre stands as a showcase for **how historic buildings can be elevated** to meet the expectations of **modern urban life**:

- **50,000 data points** for transparent, intelligent building monitoring
- **500 consumption meters** to help reduce unnecessary energy use
- **Integrated control of HVAC**, lighting, and shading across the site
- Sustainability certifications including **NF-HQE: Excellent, LEED: Gold, BREEAM: Very Good, and Effinergie Rénovation**

**UNITING HERITAGE PRESERVATION, INTELLIGENT BUILDING CONTROL,
AND EXCEPTIONAL SUSTAINABILITY PERFORMANCE**

Real buildings. Real results.

Probonio Arena, Kassel, Germany

WHERE INNOVATION MEETS ARENA EXCELLENCE



THE COMPANY AND THE CHALLENGE

A comprehensive building automation solution transforms an aging venue into a high-performance multifunctional arena—elevating efficiency, visibility, comfort, and long-term sustainability.

Probonio Arena set out to do more than modernize an aging facility—it aimed to redefine what a nearly 50-year-old venue could become. Without a central building automation system, the arena had limited insight into energy use, reduced operational efficiency, and fewer opportunities to enhance occupant comfort or advance its sustainability goals.

THE SOLUTION

To support this ambitious transformation, an integrated building automation solution was implemented to unify and optimize the arena's critical systems, including heating, cooling, ventilation, power, shading, and electric vehicle management. Approximately 1,500 sensors and actuators now enable intelligent, demand-based control across the venue, helping operations respond dynamically to real-time conditions. **Through Kieback&Peter's Qanteon platform, arena operators now have a clear, real-time view of energy flows, system performance, and CO₂ balance. This enhanced transparency supports more informed decision-making, greater operational control, and a stronger foundation for long-term energy resilience.**

THE RESULTS

Today, Probonio Arena is positioned as a more efficient, future-ready, and climate-conscious venue. The modernization delivers measurable impact for both operations teams and sustainability-focused stakeholders:

- **250,000 kWh/year saved** through decoupled outdoor heating circuits, equivalent to **25,000 liters of heating oil**
- **Around 300,000 kWh/year additional savings expected** by using ice resurfacing snow for air dehumidification, equivalent to **30,000 liters of heating oil**
- **Simple, reliable CO₂ footprint reporting** for the DEL (German Ice Hockey League) and other sustainability-focused event organizers.

PROBONIO ARENA IS POSITIONED AS A FUTURE-READY, AND CLIMATE-CONSCIOUS VENUE

Real buildings. Real results.

Grattacielo Piemonte, Turin

**DESIGNED TO IMPRESS
ENGINEERED TO PERFORM**



THE COMPANY AND THE CHALLENGE

Behind Grattacielo Piemonte's striking façade, smart building technology helps create a more efficient, comfortable, and responsive environment. Rising 43 stories above Turin, Grattacielo Piemonte is a landmark of contemporary architecture designed by Massimiliano Fuksas. With its striking glass façade and 80,000 square meters of office space.

The tower called for a sophisticated building automation approach—one capable of delivering premium comfort, operational reliability, and energy performance at scale.

THE SOLUTION

The local Kieback&Peter Controls team implemented a fully **integrated building and room automation solution** to intelligently coordinate HVAC, ventilation, lighting, and water management across the property. This unified approach helps the building respond seamlessly to changing conditions throughout the day, including varying solar exposure across the tower's multiple elevations.

Advanced DDC controls, connected sensors, and floor-level regulation continuously optimize temperature, humidity, CO₂, and solar load to support a consistently comfortable indoor environment. At the same time, the ISO 50001-certified Qanteon energy management system provides centralized monitoring, control, and analysis, enabling smarter energy use throughout the building. DALI lighting and wireless EnOcean sensors further enhance responsiveness and efficiency across occupied spaces.

THE RESULTS

The result is a future-ready high-rise that combines architectural ambition with intelligent performance—delivering measurable optimization and environmental benefits:

- Significant **energy and cost savings through** centrally networked building technology
- **40 tons of CO₂ saved** through optimized lighting control
- **High occupant comfort with minimal operating effort** for tenants

A COMBINATION OF ARCHITECTURAL AMBITION AND INTELLIGENT PERFORMANCE

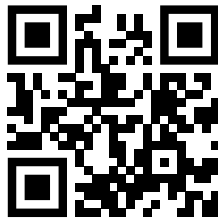


Kieback&Peter

Two industry leaders. One connected vision.



Contact our experts to start your smart building journey with Trane and Kieback&Peter.



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit trane.eu or tranetechnologies.com.

Kieback&Peter GmbH & Co. KG combines intelligent building technology, data-driven services, and nearly a century of expertise to deliver sustainable solutions. With approximately 1,700 employees and 50 locations worldwide, Kieback&Peter is trusted on prestigious projects such as Berlin's Cube, Klimahaus Bremerhaven, and Charles de Gaulle Airport in Paris. Learn more at kieback-peter.com.

Trane and Kieback&Peter GmbH & Co. KG currently operate as two fully independent companies, collaborating commercially to provide holistic solutions for building owners and operators. At the time this was published, Trane held a 49% minority interest in Kieback&Peter.