

Carbon and Energy: Monitor, Control and Optimize

TRANSFORM SUSTAINABILITY INTO BUSINESS STRATEGY

Gain the insights to plan your sustainability efforts and know whether they're on track

BUILDING HEALTH OR EFFICIENCY? CHOOSE BOTH

Sustainability is not a buzzword. It's a priority for many stakeholders around the world.

According to UNEP, the buildings and construction sector accounted for around 37% of energy- and process-related carbon dioxide (CO₂) emissions and over 34% of energy demand globally in 2021.¹ This is a new high as compared to the pre-pandemic levels, which leaves the sector off track to decarbonize by 2050.

WHY BUILDINGS ARE VITAL TO YOUR SUSTAINABILITY STRATEGY

Whether your goal is compliance, savings, carbon reduction or increased return on investment, sustainability can be a competitive advantage when you have a way to turn siloed energy data into a strategy. Honeywell Forge Sustainability+ for Buildings goes beyond identifying abnormalities and opportunities to enable users to take the actions needed to correct or stay on course. The platform's advanced control capabilities enable customers to adjust building systems – either manually or autonomously – to manage energy use and carbon emissions.

ONE PLATFORM TO DRIVE SUSTAINABILITY ACROSS YOUR BUILDING PORTFOLIO

The Carbon and Energy packages of Honeywell Forge Sustainability+ for Buildings are ready now to help customers address two pressing, yet often conflicting objectives: optimizing indoor air quality and managing the environmental impact of buildings with the aim of improving carbon reduction goals.

DRIVE SUSTAINABILITY OUTCOMES IN YOUR BUILDINGS

Honeywell Forge Sustainability+ for Buildings ends the hassle of accessing and analyzing siloed energy and carbon data. It enables you to manage and control that information. Let's learn how you can monitor, control and even optimize your building's performance to manage energy consumption and carbon impact.







CARBON AND ENERGY PACKAGES



CARBON AND ENERGY MONITOR

PACKAGE KEY FEATURES The Carbon and Energy Monitor

package helps improve productivity by providing insight into a building's energy consumption and carbon emissions (Scope 1 and Scope 2 emissions) at the asset, site and portfolio level.

- Tracks energy use, Scope 1 and Scope 2 emissions and key performance indicators (KPIs)
- Enables Energy Star[®] integration for benchmarking sites and helps improve Energy Star[®] score
- Manages utility bills and automates utility bill analysis and tenant billing
- Features a standard reporting capability providing a detailed overview of building or building portfolio



CARBON AND ENERGY CONTROL PACKAGE KEY FEATURES

The Carbon and Energy Control package improves visibility and enhances compliance via control of equipment and schedules to enable adjustments before energy use escalates and gain clear analysis of energy and carbon emissions through smart meters, sensors and utility data.

• Integrates with any BMS to manage alarms and alerts,

monitor points, adjust schedules and proactively control your building

- Monitors live meter data for CO2 emissions, energy and utilities
- Includes alarm console to easily manage critical assets and KPIs with easy configuration of energy related alerts
- Tracks multiple indoor air quality measures and helps building operators and occupants understand IAQ through KPI dashboard
- Enables non-intrusive-load management providing a simpler way to break down energy consumption to equipment level for control and optimization (optional)



CARBON AND ENERGY OPTIMIZE

PACKAGE KEY FEATURES

The Carbon and Energy Optimize package helps gain energy efficiency and improve resiliency by optimizing HVAC equipment performance using machine learning (ML) and artificial intelligence (AI) algorithms to adjust your building around your desired energy consumption and IAQ goals.

- Improves HVAC energy use, both air side and water side
- Optimizes energy-intensive assets such as chillers, boilers, fans, pumps, air-handling units, lighting and more
- Reduces the need for manual intervention

- Extends asset performance and lifecycle through continuous optimization
- Helps buildings achieve
 WELL certifications or ratings from the International
 Well Building Institute

HOW IT WORKS



BETTER INSIGHT MEANS BETTER COMPLIANCE

Visual analytics

- View, filter, and benchmark custom KPIs such as energy use and carbon emissions
- See analysis at multiple levelsv across your portfolio, from buildings down to individual assets
- Visualize KPIs in real time, and as trends and forecasts

Compliance and reporting

• Document results for compliance and industry benchmarking such as Energy Star

- Validate the effectiveness of energy conservation measures
- Create standard reports on energy performance, energy use intensity (EUI), utility bills and carbon emissions

Utility bill management

- Collect and analyze utility bill data, automatically
- Integrate directly with utility companies all over the world

Continuous equipment optimization

• Enable continuous equipment "tuning" based on actual performance through monitoring-based commissioning that frees you from the costly limitations of retro-commissioning

• Help buildings achieve dual goals of maintaining healthier spaces and greater energy efficiency

Open integration and data collection

- Gain comprehensive view with data from smart meters, sensors, building management system, and utility companies
- Integrate with virtually any building systems and equipment via open standards (BACnet[™] and Modbus[®])







CARBON AND ENERGY CONTROL



CARBON AND ENERGY OPTIMIZE

KEY OUTCOMES

- Identify baseline Scope 1 and Scope 2 emissions via easy-to-use visualization tools that provide monthly and annual trends
- Reduce manual data collection
- Deploy quickly and easily

Carbon and Energy Monitor outcomes plus:

- Gain real-time insights and live meter data for building management systems to reduce energy use and CO₂ emissions
- Respond faster and address issues early
- Improve IAQ

Carbon and Energy Monitor and Control outcomes plus:

• Leverage AI/ML functionality to optimize building operations for the ideal occupant experience, energy efficiency and overall performance

CAPABILITIES

- Scope 1 and Scope 2 CO₂ emissions
- Utility bills analysis
- Reporting

Carbon and Energy Monitor capabilities plus:

- Alerts and alarms
- BMS integration
- Control and scheduling
- CO₂ emissions live metering
- Energy baselining
- Enhanced IAQ controls
- Meter interval data

Carbon and Energy Monitor and Control capabilities plus:

• Dynamically control IAQ and energy savings based on occupancy levels

Transform sustainability goals into action

hwll.co/SustainableBuildings

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