



Energy Efficiency & Environmental Sustainability

Reduce energy consumption and your carbon footprint through efficient control management and operation of your building's facilities

Connectivity & Analytics



Building Automation & Integration



Occupant Health Safety & Wellness



Operating and managing commercial buildings today is driven by performance, financial optimization, energy management, occupant experience, safety, and environmental sustainability.

One major challenge facing building owners and operators is the constant evolution that exists in the built environment.

A recent emphasis on carbon emissions reduction, evolving health protocols calling for safer, healthier, and more comfortable work environments are only two factors driving this digital transformation.

Significant capital is being invested in upgrading a building's HVAC systems.

Demands for better indoor air quality have necessitated the commercial real estate sector to address new mandates for building owners, integrators, and solution providers alike.

Constant 24/7 monitoring of ventilation, filtration, and air flow distribution also requires a centrally managed energy portfolio to track increased energy usage and identify efficiencies.

Integrating BMS controls has a definite positive impact on your building's energy management systems and on your business's bottom line.

HVAC and lighting expenses account for **60%** of a building's operating costs.

Today, Americans spend nearly **90%** of their time indoors.



When integration and interoperability is limited between systems, it is difficult to see relative peak performance levels and what opportunities exist to reduce and control energy costs.

With the convergence of smarter technology and government mandates, we are reaching a pivotal point where building owners can realize the potential savings and value that can be achieved through advanced controls.

The built environment is increasingly dependent on sophisticated and smarter connected controls. Unfortunately, many of these controls function in a siloed environment, with little interoperability or integration.

The lack of visibility in critical building operations system data is a hindrance to effectively managing resource use.

Utilizing advanced DDC controls can give building owners the access to the data needed to optimize operating costs, energy usage and address the reduction of carbon emissions.

By better managing facility operations, companies gain better control of energy usage and consumption, as well as achieve higher rates of return in overall building performance and savings.

Benefits from smart building management are an investment that can result in **double digit energy cost reductions**.

Environmental Sustainability

The importance of maximizing the efficiency of equipment and energy management systems has become even more critical. Sustainability is playing an influential role across the built environment globally. Heating, cooling, powering, and the operation of **commercial buildings are responsible for 28% of all annual carbon emissions.**

The global drive toward net-zero and environmental sustainability involves a continual pursuit to make our buildings smarter and address our environmental impact.

These initiatives are resulting in re-engagement in energy management, carbon reduction, net-zero targets, and water conservation in building portfolios. Investors realize that maintaining a strong environmental sustainability stance can safeguard a company's long-term success and enhance its social influence and public relations.

De-Carbonization and Net Zero

- **70%** of the world population will live in cities by 2050.
- Commercial buildings account for **36%** of all U.S. electricity consumption.
- HVAC equipment and lighting equates to **40%-60%** of a building's total energy consumption.
- Buildings are currently responsible for more than **40%** of global energy use.

Energy management capabilities and data analytics serve as comprehensive tools to help facility owners and operators better manage energy metering, identify trends, resolve potential energy inefficiencies, reduce overall operating costs, and carbon footprint.

Interconnected systems that generate complete and usable data are the foundation for tracking and reporting trends in lower carbon emissions over time.



Lynxspring's Role in Green Initiatives

Lynxspring's innovative products and solutions are enabling real sustainability by supporting greener building initiatives, efficient energy management, optimized equipment performance and reduction of your overall carbon footprint. Such solutions provide better insights into real-time data for comfort, productivity, wellness, and occupant experience. Collecting and connecting a building's data, ensuring data transparency, and providing meaningful data analytics are all important.

The challenge today in obtaining valuable data-driven results can lie in the aggregation of massive volumes of data from diverse sources. Our smart building technologies provide real-time actionable data you need including data tagging, standardization, normalization, and analytics.

Lynxspring helps you deploy a complete facility enterprise solution. We deliver end-to-end connectivity through a portfolio of programmable logic controllers, Niagara controllers, MS/TP BACnet controllers, VAV controllers, application-specific controllers, Monnit sensors, IAQ sensors and fully customizable IoT applications.

We enable you to have visualization of your building's data through a convenient single dashboard environment that allows you to view and access:

- Data Analytics
- Occupancy Scheduling
- Lighting/Comfort Control
- HVAC Equipment Control
- Device Performance/Alarms
- Regulatory/Network Security
- Predictive/Preventative Maintenance
- Water, Gas, Energy Monitoring/Metering
- Remote Internet Access (save trip time for diagnostics)

Managing this much building data can be complicated unless we have a method to tag, organize or categorize this data across different applications. Lynxspring's use of **Project Haystack** (semantic data modeling, tagging conventions, and normalization) equips you with a consistent and standardized methodology for describing data. Project Haystack provides a powerful catalyst to ensure a strong data management foundation for any building project.



Benefits & Savings for Building Owners

- Lower CAP Funding
- Increased Occupancy
- Higher Rent Premiums
- Regulatory Compliance
- Minimized Insurance Risk
- Modernize Building Assets
- Increased Tenant Retention
- Shorter Lease Up/Downtime
- Higher Net Operating Income
- Maximize Preventative Maintenance
- More Desirable/Marketable Building Space
- Minimize Disruption of Power Supply by 24/7 Monitoring
- Monitor Flexible Energy Loads for Demand-Charge Savings

Thermostats, humidity, pressure, current flow, and air flow sensors continually monitor conditions throughout the entire BMS architecture from your roof top units down to the boiler room and everything in between.

With Lynxspring's portfolio of products you can efficiently manage your commercial facilities, reduce energy consumption and your carbon footprint through a strategic phased and modular building project plan.

Lynxspring's products are especially designed incorporating IP networks that support most commercial building functions. *Lynxspring's JENEsys Edge devices* join your IT with a common standard and in many cases a common IP network.

New wiring expenses can cost you upwards of 20% to 80% of the retrofit project costs. Through our *Networked and Wireless* controls design, you save on wiring and labor for your lighting, chillers, boilers, fire and security systems, air handler units, roof top units and humidity control.

JENEsys Edge® Building Operating System

The JENEsys Edge Building Operating System streamlines all areas of your commercial building's operations. Addressing such challenges as maintenance and energy management, and facility usage, JENEsys Edge delivers a proven solution. Whether operating multiple retail spaces, a large industrial manufacturing plant, a multi-story commercial building or an entire university campus, our JENEsys Edge portfolio of products is a scalable solution for your specific use case.

JENEsys Edge provides dashboard visibility into energy consumption and utilization patterns of facilities, making it easier to manage and identify opportunities for performance improvement and cost savings. Combined with real-time management and control, JENEsys Edge enables better optimization of equipment run times and demand response.

The JENEsys Edge Building Operating System powered by the Niagara Framework®, combines connectivity, integration, interoperability, supervision, control, energy management, and data analytics into a single architecture. Built on an open protocol platform, JENEsys Edge allows you to continually build off the same network deployment and add additional applications as needed. Whether you have a single building or manage a multi-site campus, JENEsys Edge is cost effective and is ideal for any size and type of commercial building.



JENEsys' scalable, modular platform is designed to meet the needs of today's fast-changing, fast-growing enterprises, whether it is a single facility or multi-building environment.

JENEsys Edge Delivers Business & Operating Value

Financial & Business Management

- Scalability, flexibility, and extensibility.
- Improves visibility into operational assets.
- Operates in a cyber-secured environment.
- Streamlines multiple operations via a central location.
- Open system/open standards/reduces vendor lock-in.
- Increases profitability/lowers cost of operations.
- Preserves existing legacy system investments.

Maintenance and Operations

- UI on web, desktop, and mobile.
- Easy installation/rapid deployment.
- Remote access for diagnostics/repair.
- Quick troubleshooting/problem resolution.
- Supports preventative maintenance.

Energy Management

- Real-time data driven dashboards.
- Supports improved energy control/management.
- Provides data on consumption patterns/trends.
- Supports data aggregation from multiple systems.
- Helps to identify/reduce energy utilization costs.
- Increases tenant/occupant comfort.

Facility & Equipment Management

- A single tool/device universality.
- Multi-vendor system/app interoperability.
- Increases system/equipment functionality.
- Supports multi-party software/hardware.
- Reduces equipment downtime & maximizes lifetime value.

***One IP Platform.
Many Possibilities.***