

BUILDING
PERFORMANCE

WHERE
INNOVATION &
SUSTAINABILITY
MEET

Our customized strategies are designed to support your unique business needs

HENNEPIN HEALTHCARE CLINIC AND SPECIALTY CENTER — MINNEAPOLIS, MN

This LEED Gold Certified facility is located on a redeveloped brownfield site, and innovative design features benefit the community while reducing resource consumption.

Green spaces reduce runoff, and native plant selections reduce the irrigation needs of those spaces. In terms of energy, consumption is reduced by 21% compared to the LEED baseline, and a healthy indoor environment is further enhanced by low-VOC material selection. Sustainability is carried through post-occupancy by incorporating policies to minimize waste.

BUILDING FOR THE FUTURE

We are committed to building a strong partnership with you to help you achieve your performance goals. We understand the balance between energy performance and indoor environmental quality, and can **optimize solutions for efficiency**, as well as **human health and wellness**. We will arm you with the data to understand your options based on your current state, and equip you to make smart decisions about which path is best for you.

› Building Life Cycle Performance-Related Services



CAPITAL PLANNING

- Energy bill analysis
- Energy benchmarking
- Conceptual energy modeling
- Energy goal setting
- RFP energy performance requirements
- Energy master planning
- Energy improvement financing



DESIGN & CONSTRUCTION

- Energy Charrette facilitation
- Design review / assistance
- Alternative analysis
- Life cycle cost analysis
- Conceptual energy modeling
- Sustainable rating framework consulting
- Commissioning



OPERATIONS

- Enhanced training
- Commissioning coordination
- Controls optimization
- Occupant engagement
- BIM / energy integration
- Energy monitoring
- Measurement and verification
- Annual building "check-up"



OPTIMIZING

- Energy monitoring
- Energy master planning
- Energy auditing
- Alternative analysis
- Life cycle cost analysis
- Energy modeling
- Commissioning (re- and retro-)
- LEED-EB consulting
- Energy improvement financing

› High Performance Buildings For Human and Environmental Health

finding balance between



Optimized building performance is achieved by implementing overlapping concepts that improve human health and wellness and enhance operational efficiency. Reducing resource consumption, mindful material selection, adequate thermal comfort and air quality, and many more considerations contribute to healthy buildings and minimize negative societal, environmental, and economic impacts.



BUILDING STRATEGICALLY

When you break ground on a new facility, you're not just building a structure. You're laying the foundation for your ongoing success. That's why an increasing number of our customers are taking a closer look at factors that will impact their facility's long-term sustainability.

What We Can Do For You

Optimize the performance and reduce the life cycle costs of your facility while maximizing your sustainability efforts.

As your key partner, we know your facility inside and out — and can leverage that knowledge, along with our deep expertise, to develop strategies and solutions that support your long-term business goals.

A Lifelong Partnership

For us, the construction of your facility is just the beginning. We offer ongoing support, including annual assessments and guidance for the entire lifecycle of your facility.



Value-Based Solutions

We understand your concerns about cost and ease of implementation.

With a firm grounding in reality, we focus on using technology in creative, innovative ways that can maximize your ROI. Our solutions are easy to implement, provide significant value versus cost and staffing investments and make a measurable impact on the efficiency of your facility.

Customized Strategies

We closely assess the unique needs of both your facility and your business to design and implement the just-right-for-you strategies.

Energy Considerations

- **Energy Reduction:** We take pride in our innovative energy reduction solutions, such as using regenerative drive technology to reduce a facility's elevator transportation energy.
- **Energy Efficiency:** From sensor light controls to translucent partition walls, energy-efficient opportunities abound in modern facilities.
- **Energy Capture:** Heating and cooling can be a source of enormous cost and waste for many facilities. A heat recovery and thermal storage system moves heat around a building (rather than generating it and exhausting the waste) and takes advantage of the sun's effect on a building's temperature.

Health & Wellness

- **IEQ Considerations:** We balance energy needs with the needs of the occupants; factors such as ventilation, air quality, thermal comfort, views, daylighting, low-emitting materials, acoustic comfort, mitigation of pathogen spread, and more can contribute to an indoor environmental quality that has positive impacts on occupant health and production

Through All Phases:



CITIZENM HOTEL — SEATTLE, WA

LEED GOLD CERTIFIED:

- Prefabricated modular construction reduced waste generation by 60%.
- Envelope and HVAC optimizations resulted in a 24% energy reduction.
- Water-efficiency, vegetated shading, and access to transportation opportunities also contribute to the sustainable site.



WORKING TOGETHER OUR RELATIONSHIPS

- Minnesota Sustainable Growth Coalition
- U.S. Green Building Council Gold
- Contractor's Network

19 YEARS OF EXPERIENCE as one of the country's top builders of RENEWABLE ENERGY PROJECTS

32nd OF TOP 100 GREEN CONTRACTORS

205 LEED ACCREDITED PROFESSIONALS

Other Offerings:

In addition to our custom energy strategies, we can also offer LEED consulting services such as:

- LEED feasibility studies
- LEED charrette facilitation
- LEED website management
- Technical direction on LEED compliance
- Project assignment & schedule development
- Submission process management

Consulting for High Performance Targets such as:

- American College & University Presidents' Climate Commitment
- Living Building Challenge
- Green Globes
- Net Zero Energy
- Architecture 2030
- WELL Certification
- Fitwel
- Carbon Neutral
- EPACT
- EISA
- ENERGY STAR

Case Study

KELLER CENTER - HARRIS SCHOOL OF PUBLIC POLICY, UNIVERSITY OF CHICAGO Chicago, IL

COMPLETED: November 2018

COST: \$60M

SIZE: 120K sq ft

PROJECT INCLUDED: Complete design & construction upgrades: rebuilt with offices, meeting rooms, lounges and reception areas. Mortenson added a partial fourth floor with a green roof with terrace, renovated the basement, and built a central four-story atrium called the Forum.

BUILDING PERFORMANCE: Building solutions included features such as:

- Daylight harvesting system
- High performance skylights
- 100% LED lighting, sensor controls
- Radiant heating/cooling system
- Grant-funded photovoltaic panels
- Green roof
- 15,000 rainwater cistern
- Reclaimed materials & furniture

RESULTS: Using the building's embodied carbon elements (concrete structure, exterior walls, cladding), saved 2,933 tons of carbon production and rainwater use saves 525,208 gallons of freshwater each year. Energy efficiency measures allows the building to achieve 54% better energy consumption compared to the baseline. The sustainable design and construction of this project ultimately resulted in LEED Platinum certification and LBC Petal Certification in Materials, Energy, and Beauty.

TRANSFORMATIVE DESIGN & ADAPTIVE REUSE OF A HISTORIC BUILDING

AIA
COTE Top Ten
2020 Award Winner



SUSTAINABILITY IN SPORTS: MILWAUKEE'S BIRD-FRIENDLY VENUE

Case Study

FISERV FORUM Milwaukee, WI

COMPLETED: August 2018

COST: \$524M

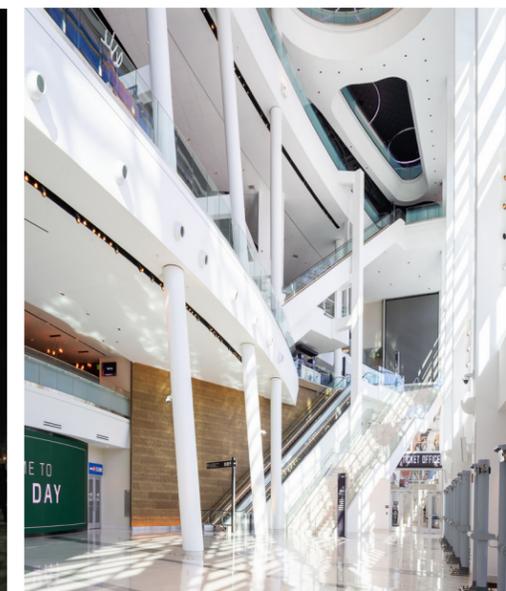
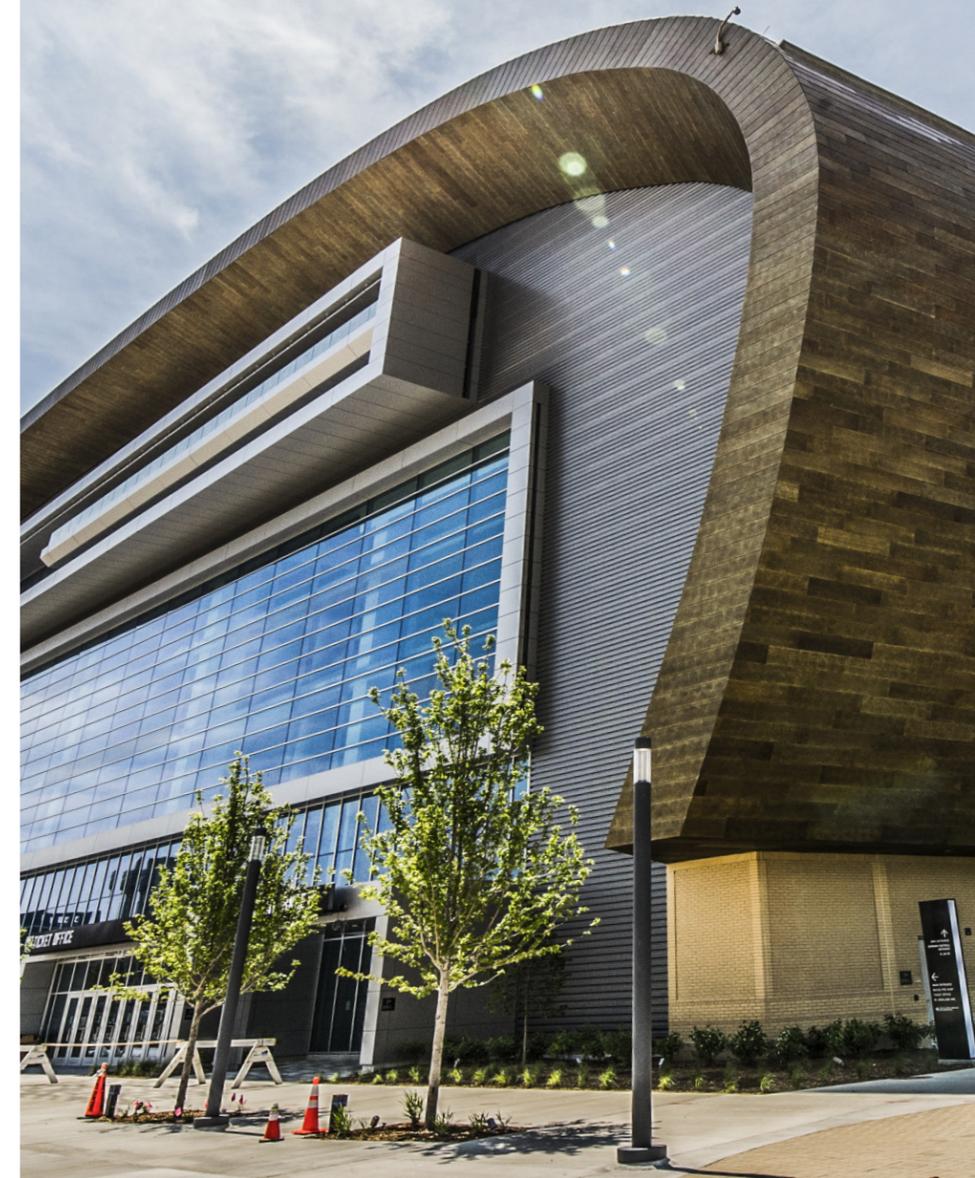
SIZE: 730K sq ft

PROJECT INCLUDED: A 17,500-seat multi-purpose arena, encapsulated by a striking arched roof and glass facade.

BUILDING PERFORMANCE: Many of the design aspects were focused on reducing consumption in terms of energy, carbon, and water, as well as fostering a healthy indoor environment.

- Electric vehicle charging stations
- Heat recovery technology
- Low-flow plumbing fixtures
- Native vegetation
- Environmentally-friendly cleaning plan and procedure
- Compostable dinnerware during events
- LED light fixtures

RESULTS: The LEED-silver certified arena serves as the cornerstone of a new entertainment district in Milwaukee. The glass facade has a ceramic frit patterns that reduces fatal bird collisions with building, making it the world's first bird-safe sports and entertainment venue. The low-flow plumbing fixtures reduce water consumption by 30%, roughly equating to 400,000 gallons of annual savings. The heat recovery technology and other HVAC design components reduce energy use by 12%. Selected materials and ongoing operations continue to support healthy indoor air quality within the space.





ONE DISCOVERY SQUARE

ROCHESTER, MN

LEED GOLD CERTIFIED:

- Energy efficiency measures perform 20% better than code requirements.
- Water consumption is reduced by more than 40% with efficient fixtures.



➤ Meet the Expert

BUILDING PERFORMANCE

JULIANNE LAUE

Director of Building Performance

Julianne specializes in analyzing energy efficiency, building physics, life cycle cost analysis and related services. A licensed mechanical engineer, she holds a Master of Science degree in computational fluid dynamics modeling (CFD), is an ASHRAE Building Energy Modeling Professional (BEMP), a LEED AP, and is involved in many organizations that promote and study sustainability in our built environment, including IBPSA, ASHRAE, and the U.S. Green Building Council.