

Built Environment Team



Rocky Mountain Institute

a think and do tank™

“Thank you RMI for your hard work on the Greening of the White House [charrette and reports]. I am delighted that this project has received such widespread accolades. I greatly appreciate your assistance and look forward to your continued efforts to help people save money, protect the environment, and improve the quality of their surroundings.”

— President Bill Clinton

Beyond Green—Building for High Performance

The right blueprint can lead to the right ecological footprint, and so much more.

From materials and construction to lighting, heating, and cooling, the building industry accounts for roughly 40 percent of all the energy used in the United States.

Green building is good for the environment. And done the RMI way, it can also be good for the bottom line—everyone’s bottom line.

As an international leader in sustainable design, we work with developers, architects, facility managers, and real-estate professionals to create high-performance buildings and communities that are less expensive to build (or retrofit), more profitable to operate, easier to lease, and healthier and more comfortable to occupy—plus, they boost worker productivity.

Our Whole-System Approach

RMI analyzes interconnected issues such as site and building design, energy and water efficiency, resource-efficient materials and construction techniques, lighting and mechanical design, and the comfort and safety of the occupants. Then we reassemble the pieces in new patterns that achieve multiple benefits from single expenditures.

More than just adding green features to buildings, our integrated design process considers all aspects of the physical environment, from aesthetics and function to industry-related challenges such as financing, construction scheduling, and regulatory compliance. The result is a new generation of refined architecture with optimized energy and water efficiency, sustainable materials, and superior aesthetics.

Unparalleled Expertise

No other firm can offer decades of hands-on experience in green design combined with RMI’s level of expertise in energy and resource efficiency. Our Built Environment Team’s brain trust includes the former staff of ENSAR Group, an international high-performance building consultancy that joined RMI in 2005.

Today, RMI’s architects and designers provide the global building industry with superior, comprehensive solutions. We offer leadership and guidance at all stages of building, from conceptual design through occupancy, operation, and renovation.

“We in the design and construction industry have grown to rely on RMI to continually raise the bar for integrated thinking and high-performance design.”

— Bob Berkebile, FAIA, BNIM Architects



“In the not-too-distant future, all development will be green. Developers, builders, and buyers will discover that green not only enhances their pocketbooks, but also their health and the quality of their lives. Rocky Mountain Institute has become one of the nation’s premier resources for providing practical tools to these pioneers.”

—William S. Becker, U.S. Department of Energy

Built Environment Team Consulting Services

SUSTAINABILITY INTEGRATION AND GUIDELINE DEVELOPMENT. RMI creates environmental strategies that address every aspect of the design and construction process, including guidelines for commercial, retail, and residential design.

DESIGN CHARRETTES AND GREEN-BUILDING WORKSHOPS. Our client-focused charrettes generate innovative ideas that support the development of cost-effective, environmentally restorative architecture while addressing the specific needs of a project. RMI also offers comprehensive green-design workshops that outline key topics, including site, water, energy, materials selection, indoor environmental quality, and LEED certification.

DAYLIGHTING AND ENERGY ANALYSIS. RMI develops strategies that improve visual performance and productivity, save energy and money, and create healthy spaces. We use computer simulations and physical models to integrate daylight with architectural form, glazing and shading strategies, electric lighting design and controls, and interior details. And our cutting-edge energy analyses identify energy loads that can be deferred or reduced.

GREEN MATERIALS SELECTION. Our services range from developing a comprehensive set of specifications (“greenlining” existing specifications) to more general recommendations about environmentally preferable, cost-effective materials, as well as contractor toolkits to ensure project goals are achieved.

NATURAL VENTILATION AND THERMAL COMFORT ANALYSIS. RMI uses Computational Fluid Dynamics (CFD) to integrate effective natural ventilation strategies into building design. Detailed analysis of airflows in buildings and use of natural flow patterns can enhance thermal comfort and air quality.

ECOSYSTEM SERVICES ASSESSMENT. RMI uses GIS (geographic information systems) and CITYgreen software to assess the benefits of landscaping, open spaces, and preserves in regard to carbon sequestration and stormwater runoff reduction.

ECOLOGICAL FOOTPRINT AND CAPACITY ANALYSIS. RMI can assess the lifecycle impact of a development with regard to greenhouse gas emissions and energy and water use to quantify savings and provide recommendations to reduce environmental impact.

LEED COORDINATION. Our LEED-accredited professionals contributed to the foundation of the U.S. Green Building Council and the development of its LEED rating system. RMI is one of only five firms nationally that act as LEED certification reviewers on behalf of the USGBC. We provide all levels of LEED coordination, tailored to meet your goals.

Clients

Hundreds of leaders in diverse disciplines have called on RMI for strategic and technical help with projects, including the following:

Leading-Edge Buildings

GREENING OF THE WHITE HOUSE, WASHINGTON DC.

RMI served as lead technical advisor on the energy and environmental retrofit of the White House, the Old Executive Office Building, and their grounds. The team coordinated an initial design charrette that guided the project and has continued to provide guidance and implementation support.

PROSPER CENTER, BEIJING, CHINA.

RMI provided sustainability and LEED consulting services to The Century Prosper Center, a 1.6-million-square-foot twin-towered office building in Beijing's central business district. The project will set a standard in high-rise development through exceptional energy and resource efficiency and superior indoor environmental quality.

NELHA GATEWAY DISTRIBUTED AND RENEWABLE ENERGY CENTER, KAILUA-KONA, HAWAII.

This zero-net-energy facility incorporates cutting-edge system technologies, such as deep seawater for cooling, solar chimneys for induced ventilation, and a 25-kilowatt photovoltaic array for energy generation. NELHA is only the fifteenth project in the United States to receive LEED-NC v2.1 Platinum certification.

Green Developments

DAYBREAK, SALT LAKE CITY, UTAH.

For this mixed-use development, RMI assisted with the formulation of environmental guidelines that require homebuilders to adopt a selective list of components that create climate-responsive architecture.

LADERA (ALSO KNOWN AS TERRAMORE), ORANGE COUNTY, CALIFORNIA.

This 4,000-acre planned community is organized into six villages defined by physical features and public amenities that will serve 8,100 single- and multi-family units, a mix of commercial space, and 1,600 acres of open space.

Corporate-Wide Energy Efficiency

STOP & SHOP (ROYAL AHOLD), BOSTON, MASSACHUSETTS.

RMI facilitated a sustainability charrette focused on innovative resource-saving design and engineering, energy modeling, creative functional design concepts, and long-term maintenance for a prototype grocery store. RMI also provided electric and daylighting design for a successful prototype store.

WAL-MART, USA.

RMI led a corporate-wide effort to integrate energy efficiency into all new and existing Wal-Mart stores and operations. This ongoing effort includes technical design charrettes for efficient stores, business consulting, post-occupancy daylight monitoring, and fleet vehicle efficiency improvements.



Rocky Mountain Institute

1739 Snowmass Creek Road
Snowmass, Colorado 81654
(970) 927-3851

1215 Spruce Street, 3rd Floor
Boulder, Colorado 80302
(303) 245-1003

www.rmi.org

Rocky Mountain Institute (RMI) is an independent, entrepreneurial, nonprofit organization. We foster the efficient and restorative use of resources to make the world secure, just, prosperous, and life-sustaining.