

Breakthrough Design™ Team



Rocky Mountain Institute

a think and do tank™

“RMI’s knowledge of science and technical issues and their ability to understand and translate these issues within the business environment will serve to create innovative solutions that will work to meet significant challenges.”

—Bill Malloch, Nike Environmental Action Team

Advanced Resource Efficiency—The Competitive Edge

The efficient and restorative use of resources and whole-system design can catapult your organization to a new level of profitability and effectiveness. Once considered “just good for the environment,” RMI’s methodologies and know-how are now an engine for real business success.

RMI shows leaders in dozens of diverse industries how to improve operations, motivate people, increase profits, and more—all by doing what they already do, with fewer resources and more efficient designs.

The Efficient Way to Do Business

Our Breakthrough Design Team looks comprehensively at critical operations to show our clients creative new ways to turn waste into profits.

We closely examine everything you do—from the most basic aspects of a business model, facility, or product to the most complex industrial process details—to identify the synergies that connect seemingly unrelated functions.

We design integrated solutions that address an array of energy, resource and business-related challenges at once, at modest extra cost—indeed, often at lower capital cost because simpler, leaner designs can make some equipment smaller or unnecessary.

In fact, by applying RMI’s knowledge and resource-saving techniques, client companies have reported resource savings of 30 to 50 percent on retrofit, more on new construction. What’s more, our team inspires profitable ingenuity throughout your organization.

Success is in Our Nature

Helping clients reduce waste comes naturally. RMI’s Breakthrough Design Team embraces the principles of biomimicry, a strategy that scours the natural world for sophisticated solutions to everyday design challenges. This revolutionary approach emulates nature’s resource-sharing processes with closed-loop production. It inspires industrial systems and products that reduce dependence on nonrenewable inputs, eliminates waste and toxicity, and promotes dramatically higher efficiency.



“RMI helped STMicroelectronics, the world’s No. 6 chipmaker, cut energy use by 5 percent per year. Last year, with \$40 million in improvements, the company saved \$173 million.”

—BusinessWeek

Breakthrough Design Team Services

RMI’s “think and do” approach brings hands-on experience garnered from work in dozens of industries, combined with decades of RMI research findings, to every client engagement.

RMI’s work considers your entire organization—from the boardroom to the

shopfloor. We take our intellectual capital to the heart of your operations and help your engineers, designers, operators, and managers implement realistic innovation in resource strategy. We deliver our results in a format that is best suited to your needs, including:

- Process and Product Design and Strategy
- Facility Walkthroughs and Energy Assessments
- Innovation Workshops
- Strategic Planning and Management Consulting
- Project Management and Implementation
- Measurement, Recording, and Communication
- Sustainable Community Strategy and Design

When TI was planning our new \$3 billion wafer fabrication facility, we teamed up with RMI for a design charrette. In just three days we sketched out a roadmap for a new facility that will use 20 percent less energy and 35 percent less water than our previous “fab.” Best of all it cost 30 percent less than our previous facility. Sustainable design makes great business sense. RMI showed us that there is a better way.

—Paul Westbrook,

Sustainable Development Manager, MGTS, LEED AP, Texas Instruments International Facilities

Clients

Our work has benefited more than 80 Fortune 500 companies in a diverse range of sectors, including aviation, data processing, electronics, engineering, renewable energy equipment, oil and gas, shipping, software, chemicals, electricity, semiconductors, automotive, food and beverage, entertainment, apparel, hospitality, biotechnology, forest products, agriculture, cement, metals, mining, carpets, controls, electronics, general manufacturing, military, retail, real estate, and finance. Success stories include:

TIER ONE AUTOMOTIVE CLIENT

RMI is assisting in the development of a 10-year strategic product portfolio. Initiated with our Innovation Workshop, RMI is taking concepts from early stages into analysis and eventually proof of concept. RMI has partnered with this client to integrate across disciplines and industries, catalyze new partnerships, and provide exceptional value from ideas to creation.

WAL-MART

RMI is helping Wal-Mart reduce fossil fuel consumption in both transportation and electrical end uses. Our analysis led Wal-Mart to announce it will double its heavy trucks' fuel economy by 2015—saving more than \$300 million per year while reducing carbon dioxide emissions by 26 billion pounds between now and 2020. RMI is also helping the retailer retrofit hundreds of stores with more efficient lighting, HVAC, and refrigeration systems, and designing even higher energy and capital efficiencies into new stores.

TEXAS INSTRUMENTS

RMI helped Texas Instruments design a superefficient green chip factory in Richardson, Texas, which is expected to cut utility costs by 20 percent and water usage by 35 percent over previous fabs—yet it cost \$220 million less to build than TI's last Dallas factory, erected in the late 1990s. By building in Texas, not Asia, TI has kept 1,000 high-tech jobs at home and heightened synergies with existing plants.

ANGLO AMERICAN

RMI helped the world's largest platinum mine redesign its existing facilities, processes, and operations, and rethink the design of planned expansions. The company has begun systematic execution and anticipates a 43 percent energy savings, as well as huge water and capital savings, improved recoveries, and enhanced worker health.

ROYAL DUTCH/SHELL GROUP

As part of a multiyear effort to refine design and technologies so as to capture very large savings in energy and capital, RMI co-led examinations of the engineering design of a half-dozen major hydrocarbon facilities, both new and existing. The results are informing basic improvements in energy, economics, and climate performance.

STMicroelectronics

Our multidisciplinary team helped this Geneva-based semiconductor firm discover detailed opportunities for halving energy requirements for clean air and chilled water at eight microchip fabrication plants in Europe and North America, generally with 100 percent annual after-tax returns on investment.

INTERFACE

RMI guided the leading commercial floor coverings manufacturer through a transformation of its business. Our Team helped Interface create a 100-percent-remanufacturable carpet tile, to introduce key design and manufacturing innovations, and to devise a shift from selling carpet to leasing floor covering services that could reduce the net flow of materials and embodied energy by 97–99.9 percent.

HP BULMER

RMI led the redesign of this No. 1 world cidermaker's entire business model, strategy, and operations, revealing astonishing opportunities to improve value for all stakeholders.

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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.