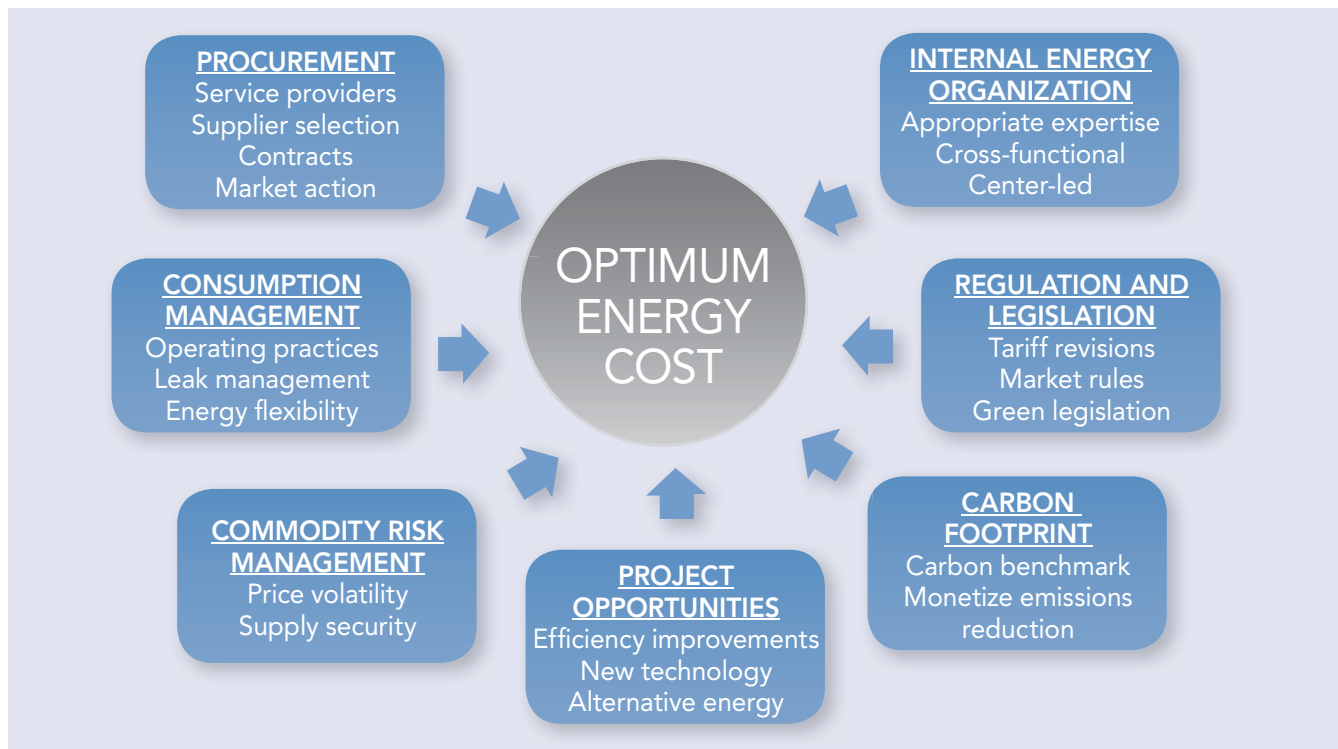


## Comprehensive Energy Management



### Overview

Even the largest and most sophisticated companies tend to look at energy costs in a piecemeal way — plant by plant, facility by facility. One reason for this is the inherent complexity of the energy marketplace. Another is the need for local facilities to ensure adequate supplies.

Yet, by adopting a comprehensive approach to energy management, many companies discover significant opportunities in areas such as:

- **Volatility and Risk Management** — Identifying and managing risks that may impact earnings
- **Cost Reduction** — Centralizing analysis to build a basis for market participation
- **State and Federal Regulatory** — Finding a voice in legislation and rulings that impact your business.

### What Is Comprehensive Energy Management?

As the chart above illustrates, energy management embraces activities that are cost-focused, such as establishing commodity prices, mission-critical such as ensuring adequate supplies, and even policy- or community-focused such as green initiatives.

Comprehensive energy management is the process of systematically analyzing all the aspects that influence total energy cost, with the goal of arriving at an optimal energy cost.

Optimal in this context does not necessarily mean the minimal energy cost. Rather, it means the cost which best balances the organization's energy objectives across many dimensions.

These dimensions may include:

- **Organizational** — Risk management, consumption management, internal energy organization, carbon footprint and green initiatives, regulatory and legislative issues
- **Commodities** — Electricity, natural gas, heating oil, propane, steam, compressed air, oxygen, nitrogen, hydrogen, etc.
- **Technological** — Specific project opportunities within the company, such as efficiency or emissions improvements.

Greybeard can help you assess your current practices, develop a plan, and proactively guide all aspects of energy management. We can act as your subject matter experts, bringing our years of expertise in comprehensive energy management to your operations.

*Please turn to reverse side.*

# Comprehensive Energy Management

IMPROVEMENT AREA	BENEFIT	SERVICES OFFERED
<b>Procurement Practices for Energy Commodities</b> Including electricity, natural gas, oil, industrial gases	Achieve lower costs through: <ul style="list-style-type: none"> <li>• Competitive supplier selection in deregulated market areas</li> <li>• Optimum tariff participation in regulated areas</li> <li>• State-of-the-art market knowledge</li> <li>• Leading-edge market participation</li> </ul>	<ul style="list-style-type: none"> <li>• Strategy development</li> <li>• Fuel selection analysis for multi-fuel systems</li> <li>• Vendor selection</li> <li>• Contract negotiations</li> <li>• Contract administration</li> <li>• Price risk management</li> <li>• Supply risk management</li> <li>• Regulated utility tariffs</li> <li>• Report design and data management</li> </ul>
<b>Consumption Management</b>	Minimize energy costs by developing leverage across multiple facilities	<ul style="list-style-type: none"> <li>• Operating schedule optimization</li> <li>• Utility systems optimization</li> <li>• Process efficiency improvements</li> </ul>
<b>Commodity Risk Management</b>	Identify and manage price volatility and supply risk	<ul style="list-style-type: none"> <li>• Price hedging practices</li> <li>• Natural gas and electricity delivery and transport systems</li> <li>• Fundamental energy market drivers</li> </ul>
<b>Project Opportunities</b>	Address specific capital efforts to improve energy efficiency or develop capability for using alternate energy commodities	<ul style="list-style-type: none"> <li>• Opportunity assessment</li> <li>• Consumption efficiency improvement</li> <li>• ROI analysis</li> <li>• EPC contractor selection</li> <li>• Contract negotiations</li> <li>• Data collection and management</li> </ul>
<b>Carbon Footprint</b>	<ul style="list-style-type: none"> <li>• Participate in green initiatives</li> <li>• Develop emissions credits</li> </ul>	<ul style="list-style-type: none"> <li>• Benchmarking</li> <li>• Monetizing emissions reduction</li> </ul>
<b>Regulatory/Legislative</b>	Participate individually or as part of a group to influence tariff issues and legislation for favorable outcomes to the company	<ul style="list-style-type: none"> <li>• Representation and consultation on energy-focused trade groups</li> <li>• Deregulation and market shaping initiatives such as:                             <ul style="list-style-type: none"> <li>- PJM electricity markets</li> <li>- Tariff revisions</li> <li>- Green legislation</li> </ul> </li> </ul>
<b>Internal Energy Organization</b>	Centrally focus coordination of all aspects of energy cost management for great efficiency and cost reduction	<ul style="list-style-type: none"> <li>• Guidance on overall company energy mission</li> <li>• Subject matter experts to operating facilities to execute energy mission</li> <li>• Procurement and risk management protocols</li> <li>• Support on project development and financing</li> <li>• Mechanisms for sharing best practices</li> </ul>

## Why Greybeard

Greybeard delivers leading-edge energy management consulting and guidance. Collectively, Greybeard's energy team has decades of experience in managing every aspect of energy service for large and small companies where energy cost is a significant concern. The Greybeard energy team also has been involved in the transformation and evolution of the competitive markets for natural gas

and electricity — and can provide guidance and leadership in crafting optimum strategies to achieve value in these environments.

As independent advisors with no ties to or conflicts with other participants in the energy industry, our loyalty is to our clients. Clients compensate us strictly on a fee basis. We do not work on commission or receive compensation from service providers or commodity suppliers.

### ABOUT GREYBEARD ADVISORS

Greybeard Advisors is a leading provider of advisory services, including professional training and mentoring programs, for procurement and supply chain management.

To learn more, visit:  
[www.GreybeardAdvisors.com](http://www.GreybeardAdvisors.com)