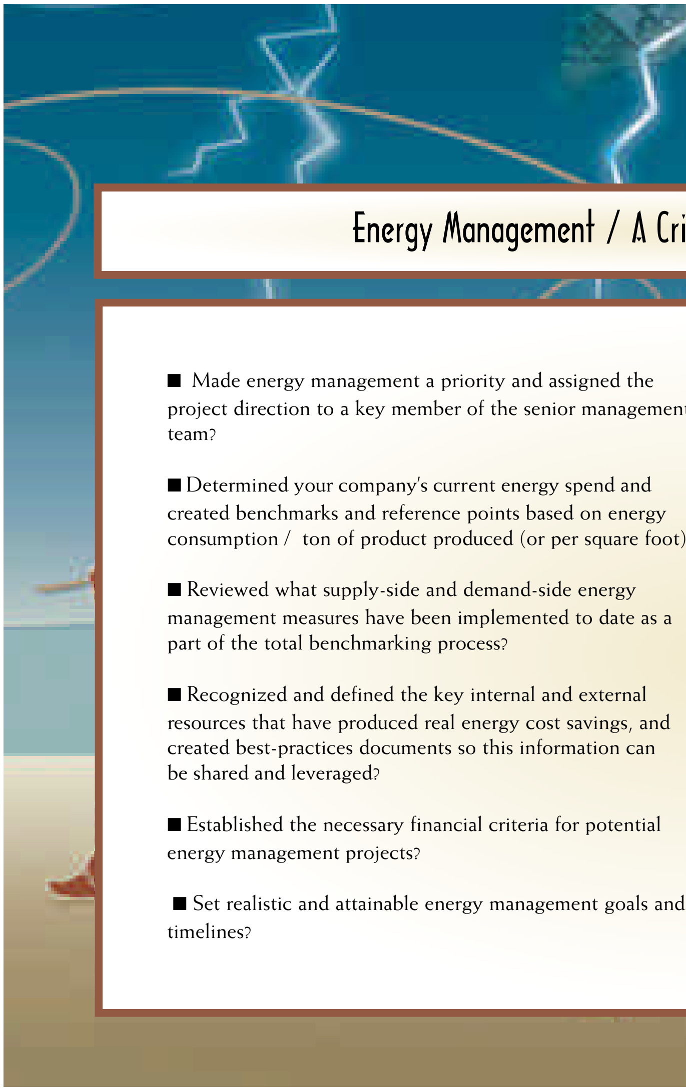
CPG Energy Cost Reduction:

For most CPG companies, energy cost savings are low-hanging fruit — and if GMA member companies work together in a strategic partnership, the savings harvested will be greater for every individual player, according to the authors of this article. Here's what they propose ...

By Richard G. Lubinski, President, Think Energy Management LLC, and
David R. Koester, President, The Linkage Group LLC



Energy Management / A Critical Drivers Checklist: Have You ...

- Made energy management a priority and assigned the project direction to a key member of the senior management team?
- Determined your company's current energy spend and created benchmarks and reference points based on energy consumption / ton of product produced (or per square foot)?
- Reviewed what supply-side and demand-side energy management measures have been implemented to date as a part of the total benchmarking process?
- Recognized and defined the key internal and external resources that have produced real energy cost savings, and created best-practices documents so this information can be shared and leveraged?
- Established the necessary financial criteria for potential energy management projects?
- Set realistic and attainable energy management goals and timelines?
- Informed yourself of the current state of deregulation and other legislation in the states where you have manufacturing plants?
- Recognized the issues and opportunities common across your plants (or those of other GMA members)? Offered to share experiences, best practices, business models and case studies? *(Remember, what works for another GMA member company may also work for you! This is your opportunity to gain critical mass.)*
- Considered the value of forming a GMA energy management "Round Table" Council? *(Doing things together creates a greater return on your investment dollars, and allows you to share resources while accessing the latest in available technology.)*
- Examined the four tracks of energy management program development?
  - Plant-level opportunities?
  - Corporate-level opportunities?
  - Partnering with other GMA member companies?
  - Leveraging supply- and demand-side energy management opportunities?

A Modest Proposal

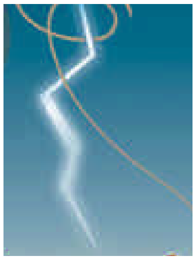
TODAY, WITH ENERGY COSTS AND GLOBAL SUPPLY UNCERTAINTIES ON THE FRONT BURNER, and executives under the fiercest profit pressures in memory, the time is ripe for every top CPG executive to look with fresh eyes at what we know to be a reliable source of significant cash savings: corporate energy costs.

Why? Energy is by no means a *fixed* cost — though companies sometimes act as if they assume it is. On the contrary, energy can be a rich source of savings and cash generation — if strategically managed.

Moreover, unlike new product development, marketing and promotion, energy management is an area in which companies do not compete.

Instead, it is a challenge where cooperation –- sharing of best practices and leveraging of critical mass to achieve supply- and demand-side energy savings opportunities — can return significantly greater ROI than individual organizations could achieve on their own.

THEREFORE, WE RECOMMEND THAT GMA MEMBERS CONSIDER THE CONCEPT OF STRATEGIC PARTNERSHIP, applied to the challenge of reducing the high costs of energy. ON THE FOLLOWING PAGES, HERE'S WHY ...



CPG Energy Cost Reduction: *A Modest Proposal*

When legitimate energy projects are evaluated based on ROI and NPV, they are often surprisingly attractive from a financial payback perspective ... In some cases, energy related improvements will pay for themselves in a year or less, and will continue to produce cash savings annually.

■ THE DECISION TO PURSUE A STRATEGIC PARTNERSHIP STARTS WITH CLEAR-HEADED CORPORATE SELF-APPRAISAL. Begin by asking yourself these important basic questions:

■ Is your organization making effective use of available resources and accessing the right tools to significantly trim energy costs and operating expenses?

■ Has the deregulation of electricity and natural gas lived up to the promise of lower energy costs?

■ Are you seizing the opportunity to share best practices and benchmark case studies with other GMA member companies?

IF YOU'RE LIKE MANY CEOS AND CFOS, YOU LIKELY REALIZE THAT, UNFORTUNATELY, YOU CANNOT ANSWER THESE QUESTIONS, since energy costs are not, typically, one of the key elements in the corporate strategic planning process.

Thus, while energy management is often talked about, it does not normally get the senior management attention it deserves. Again, instead there is too often an (incorrect) assumption energy cost is a fixed operating expense.

BUT WASN'T DEREGULATION SUPPOSED TO HELP PUT A LID ON ENERGY COST INCREASES? Proponents of deregulation made many promises about the benefits it would bring including increased competition, changes in market dynamics and significantly lower energy costs.

Unfortunately, in most cases there has been little long-term competition, and the cost of electricity has increased. The wholesale cost of natural gas has doubled and, in some cases, nearly tripled on the wholesale NYMEX trading floor.

This past winter's high natural gas prices have even forced some manufacturing companies to shut down or idle their plants. Many manufacturers who were not in a position to shut down manufacturing were forced to use a "buy through" clause in their electricity agreements, which is intentionally very expensive to the end user. The cost of one major "buy through" for one week can easily wipe out the contract savings for the entire year, and can even put a company into red ink.

SO – IS ENERGY MANAGEMENT AN OVERLOOKED STRATEGIC OPPORTUNITY WITHIN YOUR COMPANY? Or has it been relegated by default to the status of a mere tactical issue, one to be addressed by your COO, your local plant manager or — worst case –- assigned to no one at all?

Of course, if you, as CEO or other senior executive, are going to consider putting yet another business issue on your already overfilled plate, you need to know whether it's truly worth your time and attention. So, let's do a little math, to see whether your organization should take a fresh look at, and perhaps a different approach to, energy management; and what better energy management might mean to you in today's business climate.

IN OUR EXPERIENCE, GOOD STRATEGIC ENERGY MANAGEMENT CAN PRODUCE SAVINGS OF 10 PERCENT.

Let's assume, to use GMA's number, that the annual sales revenue of all GMA-member companies totals $500 billion. CPG company energy costs — electricity, natural gas / fuel —typically average two percent (or more, depending on product mix and manufacturing process, putting annualized industry energy costs at some $10 billion. Saving 10 percent of this would return $1 billion.

Thus, with an average industry gross margin on sales of six percent, the additional sales needed to equal the cash produced by better energy management would be $17 billion.

And it's important to note that savings can vary from five to 20 percent, depending on the scope of the energy management measures implemented.

FROM THIS EXAMPLE, YOU CAN EXTRAPOLATE THE SAVINGS POTENTIAL FOR YOUR OWN COMPANY.

So, why not do it? If your company can reduce its overall energy costs via improved supply-side energy management (energy procurement) and demand-side energy management (energy efficiency), it will, obviously, increase your shareholder value.

HOW TO BEGIN? ENERGY MANAGEMENT STARTS WITH A FOCUS ON FINANCE — and ends with a focus on finance. In between is an enlightened approach to energy as commodity, and energy efficiency as an effective management tool that cannot be overlooked anymore.

Indeed, of numerous requests for available company resources, energy cost control is generally accepted within facility management circles as the *easiest* to justify since: **(a)** results can be documented and tracked and **(b)** there are millions of examples where energy management has reduced utility expenses through self-funded projects.

Of course, since we are talking about generating real savings from energy management, then the opportunity costs of continuing to do *"business as usual"* are also real.

THE GOOD NEWS IS THAT THERE ARE AMPLE OPPORTUNITIES to manage your total energy expenses. The challenge for many companies is to recognize

CPG Energy Cost Reduction: *A Modest Proposal*

While there are numerous opportunities and leverage points in working with other GMA member companies, probably the most significant is the opportunity to gain critical mass. One easy way to gain critical mass on the supply side of the business is to aggregate the total utility spend within your company, or with GMA member companies within a given geography.

these as such, and then make a commitment to fund legitimate energy-related improvements (higher priority is normally assigned to all production-related investments).

WHEN LEGITIMATE ENERGY PROJECTS ARE EVALUATED BASED ON ROI AND NPV, THEY ARE OFTEN SURPRISINGLY ATTRACTIVE from a financial payback perspective *(see example, opposite page)*. A legitimate energy cost reduction project with a two-year simple payback generates a 50-percent ROI. In some cases, energy related improvements will pay for themselves in a year or less, and will continue to produce cash savings annually from then on.

Given the magnitude of your company's annual energy expense, making small percentage improvements in energy costs can have significant improvements on your bottom line.

The first steps are assessing the critical energy cost drivers, and how best to "mine" the opportunities, define the process and develop a target strategy to achieve real savings. You do not need to address all "critical drivers," but you should be willing to enter into an honest assessment process, and select those right for *your* business and that seem most productive for *your* operations in the short-term.

We think that even if you do not elect to pursue all potential savings areas, it is still important to understand the impact they can have on your bottom line. In our experience, the low-hanging fruit can sometimes be found in the most unusual places!

Above all, energy management must become a dedicated effort within your company, supported on an ongoing basis with an adequate level of resource allocation. Even the best plans and strategies will fail to produce results if they are not recognized and supported at the corporate level.

STRATEGIC PARTNERING, WE BELIEVE, IS THE BEST WAY FOR GMA-MEMBER COMPANIES TO ELEVATE THE IMPORTANCE OF ENERGY MANAGEMENT to an effective level, take advantage of best-practices sharing and critical mass, and thereby reduce energy costs. It is a powerful vehicle readily available to any company that chooses to embrace it.

Since most GMA member companies share similar energy procurement and energy management challenges, it is only natural to look within the GMA organization for strategic partnering opportunities to solve them. Strategic partnering allows you to gain momentum, create greater critical mass, find more opportunities to leverage (both supply-side and demand-side) and a better ROI on your investment dollars.

YOUR FELLOW GMA MEMBERS FACE THE SAME ENERGY MANAGEMENT ISSUES, CHALLENGES AND OPPORTUNITIES that you do — but when was the last time you compared notes?

While there are numerous opportunities and leverage points in working with other GMA-member companies, probably the most significant is the opportunity to gain critical mass. One easy way to gain critical mass on the supply side of the business is to aggregate the total utility spend within your company (or with GMA member companies within a given geography).

This is a powerful and proven methodology that will allow you to gain leverage with your collective buying dollars. With this in place, you can then start thinking about what kinds of opportunities can be generated on the demand side of energy management.

This is a genuine avenue that leads to profitable partnering success and real contributions to your bottom line! Recognize that the issues are common across most of the GMA membership. So — *minimize and share the risk through multi-site projects, and / or by partnering with your GMA associates!*

ONE SENIOR MANAGEMENT CONSIDERATION IS WHETHER, USING INTERNAL RESOURCES ALONE, your staff can successfully manage energy cost control projects. A 1999 article in *CFO Magazine* found many financial executives were "in the dark" on subjects of energy and related cost reductions. In many cases, a partial outsourcing model works best, since this energy management business requires expertise and experience that often cannot be found internally. Energy management is usually not a core competence, and therefore your staff needs an independent energy consultant or strategic energy partner to predictably produce real utility cost savings with a minimum of business risk.

HOW TO BEGIN? Since energy management starts and ends with numbers, the natural place to start is collecting the true energy cost for each facility. This can be as simple as the primary electricity and natural gas costs. While this can be extracted from your accounting records, it is only the first step, since you do not have the energy consumption data, which is the basis for your utility bills. When you have the electrical consumption (KWH) and demand (KW or KVA) and the natural gas consumption (MCF) you are closer to creating management-level data.

The consumption data then lets you get an average cost per energy unit, which will reveal how well or how poorly you are doing on the supply side of energy management for each individual plant.

This analysis will also reveal that energy rates vary widely across the US and even within states, based on which utility serves the facility and whether (in deregulated regions) third-party contracts are in place to bring down the cost of the energy commodity. Another useful tool is to look at total energy cost based on: (a) dollars per square foot and (b) dollars per pound or ton of product.

Based on this data, your company can then start to map out its preliminary goals to reduce its energy costs.

This process is normally directed first at the facilities with the higher costs or those with higher energy cost per ton of product produced. If your facilities are grouped into thirds, you could then address the highest third of your facilities as the phase-one undertaking. If this is successful, the best practices from this first group can be selectively applied to the second third. This follows the standard exception management approach to business, in which the final third may not justify your time and financial resources.

IN CONCLUSION, EFFECTIVE ENERGY COST CONTROL IS A CLASSIC "WIN-WIN" SITUATION. We believe, based on our experience, that you will be pleasantly surprised how strategic partnering on energy management can help you make energy cost control a new profitability tool. ■

EXAMPLE:

Proposed Energy Management Project

LIGHTING UPGRADE

Retrofitting 10,000 400-watt metal halide fixtures (on 277 volts) to next-generation lighting technology in a manufacturing plant, running three shifts. The energy savings exceed 30 percent with the retrofitted lighting fixtures producing the same light level.

Capital Cost	$1,000,000
Annual Savings	$ 500,000
Simple Payback	24 months
ROI	50%
IRR	30%
NPV*	$1,191,959

** 8% Discount Rate / 15-year life cycle.*

Note: Life cycle cost (LCC) analysis shows that the original purchase price of a building system, like lighting, is only a small part of the cost (total cost of ownership). In the lighting example, the original purchase price is generally only eight percent of the total cost of ownership. Energy, in this case, is obviously the largest element of total lighting system cost.

As you can see, the old financial tool of "simple payback" does not tell the total story. NPV is a better financial analysis tool. In the real world you would also use life cycle cost (LCC) to provide the complete picture.