

# Buying power

by Jeff Weir

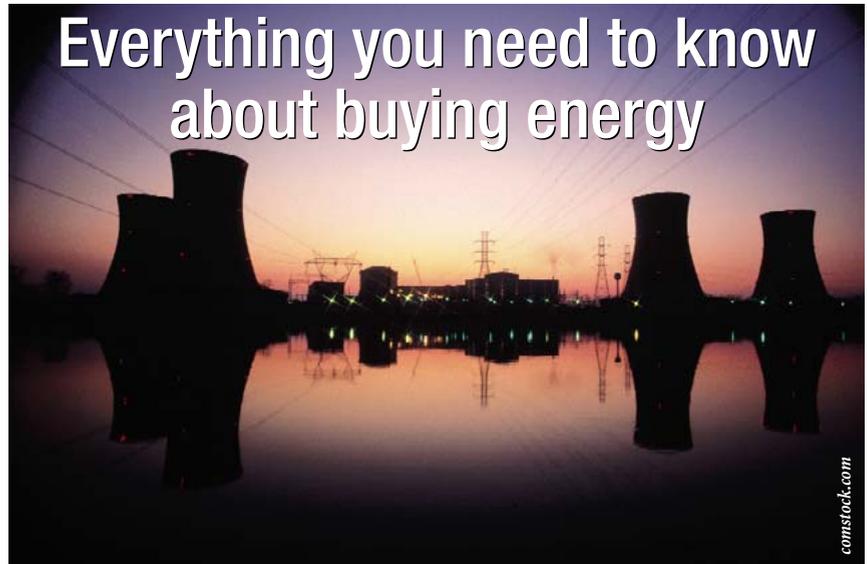
**N**ATURAL RESOURCES CANADA estimates that energy is one of the most controllable operating costs on the bottom line. Given recent headlines however on the record-breaking costs of oil and gas, emerging global policies on carbon and the depletion of some sources of supply, it might be hard to believe that there is an upside for public sector procurement officers when it comes to energy. Can you ensure your source of supply, manage costs effectively and deal with environmental concerns?

The answer is yes, but in order to do so, you must consider all angles of what is commonly being called “the energy value chain.” Put simply this involves what energy commodity you buy (gas, electricity, renewable, water) and at what price, how you convert it (the equipment that consumes and converts energy into a useful form), how you use it (heating, cooling, lighting, scheduling, comfort, maintenance and operation), and how you dispose of it (regulatory tracking and compliance, i.e., CFC, PCB disposal, *Kyoto Protocol*).

## A split in interests

One fundamental issue associated with energy management in the public sector, and which goes counter to the energy value chain, is the current split in many organizations between who makes the buying decision and who decides how that energy will be consumed. In many cases a materials management department makes the purchase, but another department is responsible for usage. A first step towards a sound energy strategy and a win-win outcome is to ensure that these areas are either brought together or mandated to work together. As well, the assistance of one consultant or company to help you navigate through the energy equation from procurement to disposal can often lead you to your energy management solution.

As with all business decisions, invest-



ment in an energy management solution needs to be strictly linked to organizational goals and long-term strategic plans. To ensure that return on investment (ROI) and operating cost reductions can be measured and evaluated, the opportunity must be assessed, benchmarked and then acted upon. This can take years (or at least a year if no measurement has taken place in the past). Sustainable energy management is a time intensive process, not a quick fix.

Do you have to wait a year before implementing some energy management solutions? No. For example, buying a commodity can be as complex or simple as you make it. Many public sector organizations that hire an energy consultant to guide them through the procurement process (and the procurement process only) mitigate the need to become subject matter experts themselves. While this has benefits, if focused merely on the procurement of energy, may have a long-term downside. Other organizations, however, do want to build this knowledge base in-house.

In fact most public sector officers manage an energy purchase substantial enough that by its very size and the nature of the public sector as a customer, will get you a

good price. A decision needs to be made therefore on how much you think you will save by developing an energy procurement strategy alone, or whether to retain a knowledgeable, fair and straight-talking energy procurement consultant as an ally that you look to regularly to guide and assist you in this high-dollar procurement. To some extent that decision will depend on your tolerance for ambiguity. Many energy providers are willing to give advice but ultimately leave it to the customer to make the final decision.

For some smaller customers sometimes an energy-purchasing consultant will “aggregate loads,” which means adding the energy needs of a number of organizations together and approaching the market to see what price can be achieved with this larger buy. For some this may provide comfort in that you can assure executives that your energy price is the same as the next guy’s, and of course, you will be able to dilute the cost for the energy consultant between organizations. However, as already stated, aggregate loads and sharing consultant costs really isn’t necessary – most public sector procurement officers have a respectable purchase in the first place. All

you really need to go to market is a reasonable idea of how long you want to lock into an energy contract and what your load is.

## Beyond price to partnership

Typically in public sector procurement, "the lowest price is the law," to quote a well-known retailer! However, an energy purchase is usually a multi-month if not multi-year contract and it has not been unheard of in recent times for energy suppliers to go bankrupt. This leaves you without a supply and still exposed for the cost of the contract. While price should always play an important role in your energy procurement strategy, one new approach might be to provide a percent scoring to the price and a percent scoring to the credit rating of the supplier. Best overall value wins! Aim for transactions with retailers who have the highest possible credit rating.

Easy as energy procurement can be, the next areas of the energy value chain – conversion and use – do start to make energy management an issue often-best left to the experts. To be successful on all these fronts, an energy management strategy depends on the generation, analysis, reporting and assurance of accurate information about energy conversion and usage. This array of knowledge and services typically goes beyond the normal services of a pure energy procurement consultant and moves into that of an energy partner.

For example, earlier this year the University of Calgary and Direct Energy Business Services reached a master partnership agreement that will yield a forecasted \$38M in student and research support, and energy savings. It will be the catalyst for a new generation of sustainability initiatives and buildings on campus, with built-in technologies directly involving students and researchers. The University of Calgary campus is the single largest point of energy usage in the city, with the main campus' energy costs topping \$17M per year. In addition to projected energy consumption reductions of more than \$30M over the

seven-year term of the project, Direct Energy Business Services will be implementing a holistic energy-management solution that will result in a CO<sub>2</sub> reduction of 14,500 tonnes or the equivalent of taking 2,960 vehicles off the road.

It makes sense therefore to ask your energy partner if they can track and index greenhouse gas emissions by site, benchmark current usage and identify potential energy reduction opportunities in facilities, assess future pricing, propose a renewable energy strategy, recommend the optimum equipment for your energy conversion – in fact, ask how they can help you to buy less energy from them!

For example equipment used to convert energy into a useful form includes air conditioners or chillers, boilers and furnaces. When purchasing a furnace or chiller, the most expensive one may in fact cost more in the short-term, but the organization purchasing it will receive the cost savings related to energy efficiency in the longer term. Your energy management partner should be able to pinpoint savings for you between a variety of models and in a variety of facilities and be able to help you maintain that equipment to ensure it runs efficiently. For example dirty filters and coils in air handlers can result in 25 percent energy waste – a regular maintenance program can lead to significant impacts on energy bills.

And then there's the little matter of energy usage and the words on everyone's lips today, "energy conservation."

Indeed in weighing-up which energy or boilers to purchase, an organization should not only examine factors such as initial cost, maintenance costs, fuel costs and fitness for purpose, but also the impact on carbon emissions or resource depletion or future availability. Here's where procurement officers can really put their prospective energy partner to work!

To identify your solution, an energy partner will start by measuring your energy consumption against other properties in your remit, or buildings in a particular segment (such as libraries, or hospitals, etc.), or against the market as a whole and benchmark where you stand in the market. Benchmarking can monitor and verify performance of a facility, a city, a building operator, or by square footage, commodity (gas, electricity, steam, water),

and by total energy used and emissions created.

An opportunity assessment providing a technical and financial analysis will show you what your challenges are and what a total energy solution could do for your bottom line. With that assessment in hand, you can prioritize recommendations, make a business case and source funding.

By encompassing all parts of the energy value chain through an energy partnership, your organization gains the expertise, financial strength and technical abilities of a single credible firm. Administrative costs are lowered and all energy and energy-related decisions are made in harmony with the energy vision for the organization. A total energy solution looks different for every property. For one building the business solution that lowers costs while providing comfort can include the efficient and effective delivery of conditioned air to offices, conference rooms and common areas. Providing an efficient and pleasant lighting environment that replaces incandescent lamps with compact fluorescents, which consume 60 to 70 percent less energy, might be the fix for another.

The decisions that you as public sector procurement officers make, particularly related to green energy, will often have major effects on the local economy and your community. Increasingly Canadians are looking to government – municipal, provincial and federal – to not only spend their dollars wisely, but to lead the way in doing so in an environmentally responsible manner. Announcing a policy on the percentage of your energy commodity buy that will be from renewable sources sends a clear message and will stimulate the market for renewable energy products and services, increasing the general demand for them and making them more economical to procure.

With the return on investment or cost reductions achievable, and the public sector being firmly under the microscope on energy conservation and green initiatives, it is time to consider total energy solutions. *mm*

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