THE ENERGY PICTURE

Where Are We Now? Where Are We Headed?

acility managers interested in becoming part of the "C" suite management team will need to think strategically about many issues to effectively prepare their organization to meet future challenges.

The energy picture is undoubtedly front and center among them because current trends point to major changes ahead that will likely affect energy costs (and therefore bottom line profits), energy sources, construction practices, and operations of healthcare facilities.

In terms of the national energy picture, where are we now? Where are we headed? And how should businesses prepare for future energy-related risks? These were the questions that were discussed during a two-day workshop last year hosted by the U.S. EPA and the Global Business Network (GBN). We brought together senior executives from twenty major U.S. companies (including Merck & Co. Inc. and Jones Lang LaSalle) to consider how potential energy impacts may affect U.S. businesses over the next decade. Their recommendations are found in a ground-breaking report entitled *Energy Strategy for the Road Ahead*, available free-of-charge at www.energystar.gov.





They found that market trends suggest that the demand for energy resources will rise dramatically over the next 25 years¹:

- Global demand for all energy sources is forecast to grow by 57% over the next 25 years.
- U.S. demand for all types of energy is expected to increase by 31% within 25 years.
- By 2030, 56% of the world's energy use will be in Asia.
- Electricity demand in the U.S. will grow by at least 40% by 2032.
- New power generation equal to nearly 300
 (1,000MW) power plants will be needed to meet electricity demand by 2030.

If energy prices also rise dramatically due to increased demand and constrained supply, business impacts could include:

- Reduced profits due to high operating costs.
- Decline of sales of energy-using products.
- Loss of competitiveness in energy intensive businesses.
- Disruptions in supply chains as suppliers are unable to meet cost obligations without going bankrupt.

Recent history also demonstrates that catastrophic weather events, terrorism, and shifting economic centers are not just events of our imagination but realities of our lifetime. Given this challenging landscape, what steps do U.S. businesses need to take today to survive a potentially disruptive energy future?

¹ Sources: Annual Energy Outlook (DOE/EIA-0383(2007)), International Energy Outlook 2007 (DOE/EIA-0484(2007), Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2005 (April 2007) (EPA 430-R-07-002)

Scenario Planning for the Future

Scenario planning is a proven, strategic tool that helps make planning for the future more tangible and immediate and also helps test how decisions made today could affect a company in the future. Two key factors that would affect the future ahead include changes in global economic patterns and shifts in U.S. policy and regulation regarding climate change. The following four scenarios were created by the corporate executives who participated in the workshop:

THE SAME ROAD

This is a world in which the combination of political inertia and global economic growth keeps the U.S. energy environment in familiar territory. Energy prices fluctuate in well established patterns, along an upward trend with a series of price spikes. Economic power steadily shifts towards developing nations, but not a disruptive pace that threatens the historically industrialized nations. There is slow growth towards strategic energy management due to relatively low energy prices, few government incentives, and lack of policy initiatives to address climate change.

THE LONG ROAD

This is a world in which a combination of rapidly shifting political conditions, along with booms and bust of global economic growth push the U.S. through a long hard transition similar to the 1970s. Energy prices fluctuate, with large and sudden spikes, and traditional energy supplies are subject to disruption and insufficient investment. Economic power shifts significantly towards developing nations in a way that is very disruptive to the historically industrialized nations and ultimately unsustainable to the newly emergent ones. Movement toward strategic energy management is overly cautious and almost too late, only happening after energy prices rise, the locus of economic power shifts, consensus around climate change passes a tipping point, and companies have had to face long and difficult adaptive challenges.

THE BROKEN ROAD

This is a world in which a combination of political indecision and uneven global economics set the stage for a sudden break with the past. Energy prices fluctuate in well established patterns for several years, until severe weather and political tensions create a supply shock that kicks up prices and long-term concerns. Through the resulting gyrations in global trade, currency, and energy markets, American political and business will crystallizes quickly to jumpstart and accelerate national programs to move the U.S. to global leadership. Though late, this move toward strategic energy management finally takes place at a torrid and successful pace.

THE FAST ROAD

This is a world in which, as a result of a combination of early political leadership and effective global economic and environmental decisions, the U.S. energy environment moves into a new territory of innovation. Energy prices rise steadily and are high enough to allow investments in alternative energy, efficiency, and urban redesign to pay off. A political consensus emerges early in the U.S. for tight but incentive-heavy regulations to control carbon dioxide emissions. A moderate shift toward developing nations does not threaten or disrupt the already industrialized nations, and the U.S. in particular benefits from the global expansion into the industrially developing world as it sells more high technology products and services.



Taking Action Now for the Future

Businesses leaders involved in the workshops were asked to explore the impacts of these four "road" scenarios on energy strategy and management in their companies. They identified five robust steps that companies should take to prepare for the future:

1. Master the fundamentals of energy efficiency.

Increasing energy efficiency within business operations is the first step toward reducing energy-related risks. Build an energy efficiency culture through executive leadership: appointing an empowered corporate energy director and team, set aggressive goals, measure and track energy performance for all operations, and establish accountability and review and recognition systems across the business.

2. Take both a longer and a broader view of investments and strategic decisions about energy.

Executives suggested that company leadership should shift the way energy is viewed. Today, it is

often viewed as a fixed cost of business rather than as a component of production or service. Shift the conversation from "How much energy can be saved?" to "How much energy is really needed?" Make major company strategic decisions (e.g., acquisitions, technology choices, and facility location) with energy cost, use, and supply in mind. Balance more assured returns of energy project investments against lower initial returns across a longer time horizon.

3. Search out business transformation opportunities in the way the company manages, procures, and uses energy.

Frame energy as a lever for positive growth and change within the business, not simply a cost.

Make the most of the strategic value of energy by thinking in terms of "Embedded Energy" and "Energy Productivity." Be innovative and aggressive in pursuing and publicizing new product and service offerings based on new energy technologies and supplies.

4. Prepare contingent strategies for emergent future scenarios.

Rehearse specific aspects of the future, including substantial and sustained swings in energy price and supply, severe weather events, and penalties or incentives around energy use and greenhouse gas emissions. Actively manage exposure to risks, and ready plans to take full advantage of what the future brings. Monitor for signs of which "road ahead" is emerging.

5. Take personal action.

Corporate leaders can take a number of "to-do" actions today for tomorrow. All can be taken individually, in companies, on corporate boards, and across industries.

The issues of energy management are a unique body of knowledge that only facility managers can bring to the executive boardroom. But sitting at that table requires thinking strategically about long-term issues. What would you recommend to prepare your healthcare organization for a successful journey down any of these roads?

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