

# Buying Clean Energy:

## Does It Make Sense for Your Hospital?

No doubt you've noticed energy prices are on the rise again. The higher costs of primary fuels used to generate electricity, particularly natural gas, are continuing to make power more expensive. According to the Department of Energy, average electricity prices are expected to climb 8 percent in the industrial sector by the end of the third quarter of 2004. The outlook into 2005 predicts much of the same; short supplies and increasing demand will keep prices higher than historical averages.

Hospitals have traditionally attempted to keep energy prices low by entering into long-term supply contracts with their local utilities. But in certain parts of the country, a new strategy is emerging that potentially offers a surprising solution to price volatility – clean energy, provided by the local utility.

### What is Clean Energy?

Clean energy, also known as “renewable energy”, “alternative energy”, or “green power” is electricity generated from resources such as the sun, wind, geothermal, biomass, and low-impact hydro facilities. Over 500 utilities in 34 states offer clean energy to their customers through what is known as “green pricing programs”. These programs do not deliver clean energy to your hospital. Instead, it is generated and supplied to the grid that serves all customers. What is being paid for is the benefit of displacing polluting fossil fuel-based sources from the grid.

Thousands of businesses, institutions, and cities across the country already buy clean energy, including Johnson & Johnson, Catholic University, the City of Chicago, and healthcare facilities like York Hospital, Walter Reed Army Medical Center, and Boulder Community Hospital. For many, however, it is still a new concept. Some organizations have outdated perceptions of the reliability of renewable energy technologies, misunderstandings about using an intermittent resource, or worries about the cost. But utilities and others are educating consumers and businesses about the viability of clean power, especially when purchased through grid-based green power programs.



By the end of 2003, more than 520 megawatts of new renewable energy capacity was installed to meet growing utility customer demand with another 170 megawatts announced or already under construction. And last June, governors of nine Western states formally signed on to a plan that commits the region to developing

30,000 megawatts of electricity — about 15 percent of current demand — from renewable sources by 2015.

With all this new capacity coming on line, will purchasing clean energy be a smart business decision for your hospital?

### Hedge Against Electricity Rate Increases

While organizations interested in displacing some portion of their electricity with clean energy will generally have to pay a premium for it (generally up to 1-2 cents more per kilowatt-hour), the advantage comes from locking in a fixed price over the long-term. Most renewable energy sources have low operating costs and no fuel costs. Although biomass fuel must usually be purchased, the sun, wind, water, and heat from the earth are free. This lack of fuel cost is a major advantage for clean energy resources. Low fuel costs mean that electricity generated is less likely to be subject to price fluctuations. Because clean energy fuel costs are more predictable, you should be able to get a contract without a fuel price adjustment clause.

If you decide to pay a fixed price, when the market price of conventional electricity runs high, you may actually save money. Regions that have an increasing share of electricity generated from natural gas-fired power plants such as the Northeast, South, and on the West Coast may be under greater risk of electricity rate increases and therefore could see greater potential savings from purchases of clean energy.

### Other Benefits

In addition to price stability, the purchase of clean power can help foster community, social, and environmental objectives. Being among the first in a community to purchase clean power is a demonstration of civic leadership. It makes a statement that you are a



progressive organization that leads by example, and one that is willing to act on your environmental or social values.

At Boulder Community Hospital in Boulder, Colorado, environmental stewardship is a core value and seen as essential in maintaining public health. David Gehant, President and CEO says a strong environmental ethic is what compelled his hospital to become the first in the state to purchase wind power. "A healthy environment is the cornerstone of a healthy community. To promote health and wellness in our community, Boulder Community Hospital strongly supports green initiatives like Windsource by purchasing wind energy."

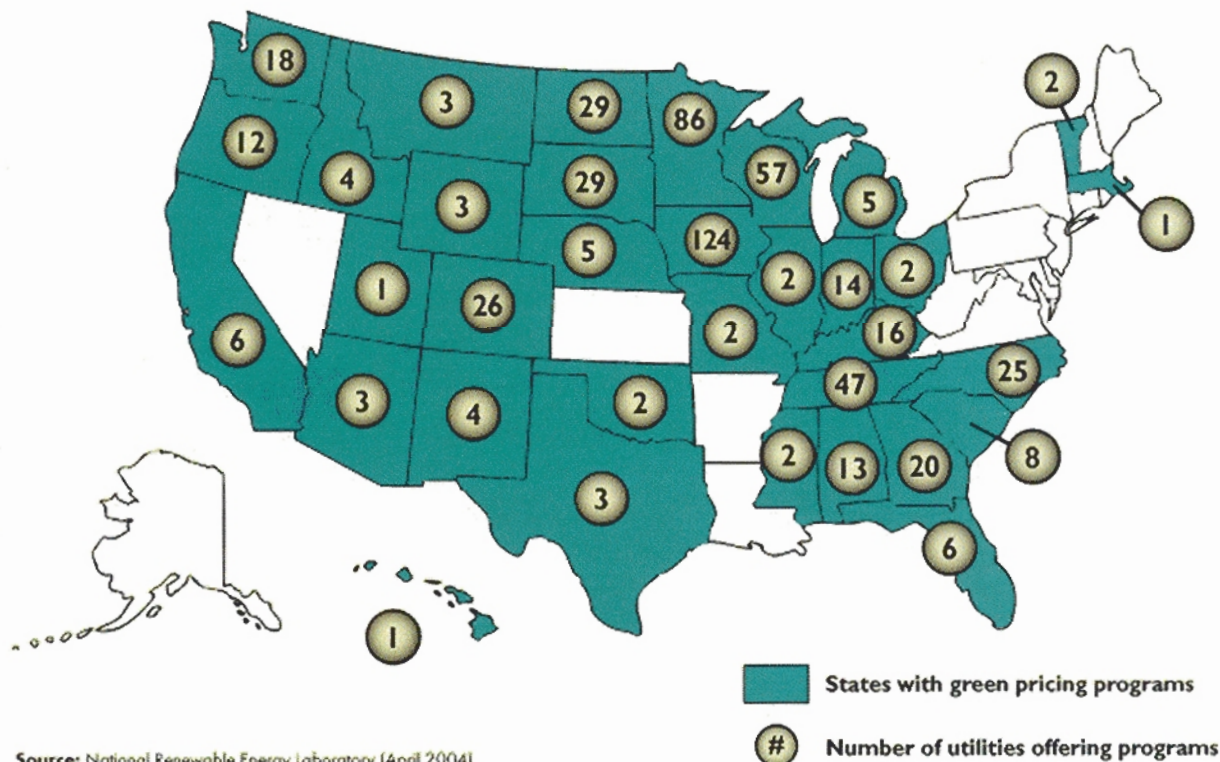
The hospital's wind energy purchase prevents the emissions of 960,000 pounds of carbon dioxide per year, the environmental equivalent of planting 200 acres of trees. In addition, hospital employees are encouraged to purchase wind power for their own homes.

### Managing the Extra Cost

How do you manage the extra cost? There are several strategies:

- **Purchase clean power for a portion of your use.** You don't have to purchase clean energy for all your electrical needs. For example, you might buy green power for just 2%, 5%, or 10% of your electricity use. Purchasing 5% clean energy may add less than 2% to your electricity bill.
- **Buy a clean energy blended product.** Some clean energy products are lower-cost because they are blended with traditional electricity and are similar to buying green power for a portion of your use.
- **Commit to a long-term purchase.** Cost may be slightly reduced by extending the time frame of your commitment to purchase clean energy.
- **Seek a fixed price contract.** Because of the predictable fuel cost, renewable energy should be available at a fixed price without fuel cost adjustments.
- **Offset the cost with energy efficiency savings.** The EPA's ENERGY STAR program provides energy savings tips and can also connect you with an energy service company in your area. See [www.energystar.gov](http://www.energystar.gov).

## Utility Green Pricing Activities





## Procurement Methods

The procurement of clean energy can be simple or complex, depending on the clean energy options available to you and the procurement method used. Generally, the more load you can aggregate, the more attractive a customer you will be to a potential supplier. If your load is small, you may be limited to purchasing off-the-shelf products, or calling around to a few suppliers.

*Negotiate with your utility.* Procurement is simple, though you tend to have fewer choices if you are served by a utility in a regulated market where there is only one supplier. If your local utility offers clean energy, visit their website and then call to discuss your interest. Perhaps the only issue for discussion is the quantity you are going to buy, but you may be able to negotiate a price break if you are making a large purchase. If your utility doesn't offer a clean energy option, and you are a large, highly visible customer, you may be able to encourage them to offer clean energy by promising to buy a large amount.

*Issue Request for Proposals.* Large organizations and public institutions in particular, often issue formal solicitation or request for proposals (RFP) for electricity supply. This may only be possible for hospitals that are located in restructured states where choice of suppliers is possible.

RFPs can be evaluated by the following criteria:

- Cost
- Fixed or variable pricing
- Percent and type of renewables
- Role of new renewables
- Resources you want to exclude
- Emission standards
- Third party certification
- Term commitment
- Ownership of the renewable attributes
- Location of resources

For large quantity purchases, RFPs can also be directed at clean energy generators. Buying directly from generators may lower your cost, but will probably require a longer-term purchase agreement.

The fastest growing energy source in the world today isn't oil, or coal, or hydrogen, or fuel cells. It's clean energy. America already produces enough clean energy to power every hospital in the country. It's working. It's viable. And more will be generated over the coming

years. Locking in a price for at least a portion of your electricity load, through a clean energy purchase, certainly makes sense for the environment. Surprisingly, it may make sense as a financial hedge against rising fossil fuel prices, too.

*Clark Reed is the National Healthcare Manager for ENERGY STAR at the U.S. EPA. ENERGY STAR offers hospitals a proven energy management strategy that helps measure current energy performance, set goals, track savings, and reward improvements. To join, visit [www.energystar.gov](http://www.energystar.gov) or contact the author at the U.S. Environmental Protection Agency - MC 6202L, 1200 Pennsylvania Ave NW, Washington, D.C. 20460. Email: [reed.clark@epa.gov](mailto:reed.clark@epa.gov) Phone: 202-343-9146*



### EPA Green Power Partnership

The Green Power Partnership is a new EPA voluntary program that seeks to reduce the environmental impact of electricity generation by fostering the development of green power. The Partnership provides technical assistance and public recognition to organizations that commit to using green power for a portion of their electricity needs. The Partnership includes Fortune 500 companies, states, federal agencies, universities, and leading organizations around the country that have made a commitment to green power. Visit [www.epa.gov/greenpower](http://www.epa.gov/greenpower).