

# Control Your

“The first energy crisis brought the beginning of what we now call integrated controls, where the heating systems became aware of the ventilating systems, and both of them integrated with the climate controls. After the oil crisis, people became aware that you had to integrate your controls so you weren’t wasting money.”

– Richard Hiebendaal, *Priva*

“The first energy crisis that hit our industry was in 1973, with the oil embargo. Growers were faced with tripled costs, and all of the sudden, a lot of things like in-floor heating were possible economically that weren’t before because the money just wasn’t there.”

– John Hoogeboom, *Rough Brothers*

“A lot of research into alternative energy programs was done back in the 1980s in response to the energy crisis of that time. Since then, unfortunately, there’s really not been a whole lot done because we didn’t have another energy crisis – until now.”

“Back in the ‘70s, double poly came on really strong because it offered growers about a 40 percent savings over the single poly houses. Even the older, leaky glasshouses were getting poly coverings, but it cut down the light too much, which affected the crop.”

– Bob Maddux, *Krueger-Maddux*

“I have the Federal Government’s own energy report on my desk right now. As we sit here today, we have the same amount of storage of natural gas – 101 percent of capacity – that we had last year. Last year the December price settled at \$7.97 – yesterday it settled at \$11.18. So if we have the exact same amount of gas going into this winter, where’s the ‘market-based’ justification for these price hikes? There is none.”

– Bill Swanekamp, *Kube-Pak*

## Energy Crisis, Jr. – Necessity’s Child

**The first true energy crisis of the 1970s spawned a wave of innovation still rippling throughout the green industry. What does the next generation of invention hold?**

by **BRAD KENNEY**, *Assistant Editor*  
[bpkenney@meistermedia.com](mailto:bpkenney@meistermedia.com)

**A**S the quotes and chart accurately illustrate, this is not the first time American growers have been burned by high fossil fuel prices. This time of

hardship is in many ways a performance trial for green industry businesses and the impending winter will see who has been hardened enough to survive the unpredictable elements of today’s chilly business climate.

As arbitrary and artificially inflated as the numbers may seem, energy

prices (and sometimes even simple energy availability) are not within the realm of grower control. As with most traded markets, the only constant here is change itself, and consistent upswings in fuel prices (followed by the occasional downward turn) are bound to happen. While the concept of

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# Energy Costs

expecting the unexpected seems like an oxymoron, it really is not. Unlike your bills themselves, your level of efficiency doesn't depend on the season or the crop, your location or even your size. "Years ago, the smaller grower didn't have the technology at their fingertips that the larger growers had," remarks Bill Swanekamp of Allentown, Pa.-based Kube-Pak Greenhouses. "Today that doesn't have to be the case, and if it is the case, then it's by choice. Sadly, our industry has gotten complacent, and some growers haven't even implemented technology that was developed 30 years ago during the first crisis!"

## Developing Markets

Industry and academic research and development departments are striving

harder than ever to fill gaps and plug holes in the marketplace wherever possible. These days, most successful growers are at least considering taking advantage of these advances. For example, Bob Maddux of Cincinnati, Ohio's Krueger-Maddux Greenhouses, burns No. 2 fuel oil or natural gas in two high-mass boilers at the Indiana location. Installed back in 1988, the heavy concrete pad they rest on has room for three more of the same. However, the consensus Bob and his son Rob have reached is that the time for change has come. "We're upgrading to high-efficiency unit heaters in our poly houses, and I don't see us installing any more high-mass boilers in our glass range," he observes. "We're exploring the low-mass option so we'd

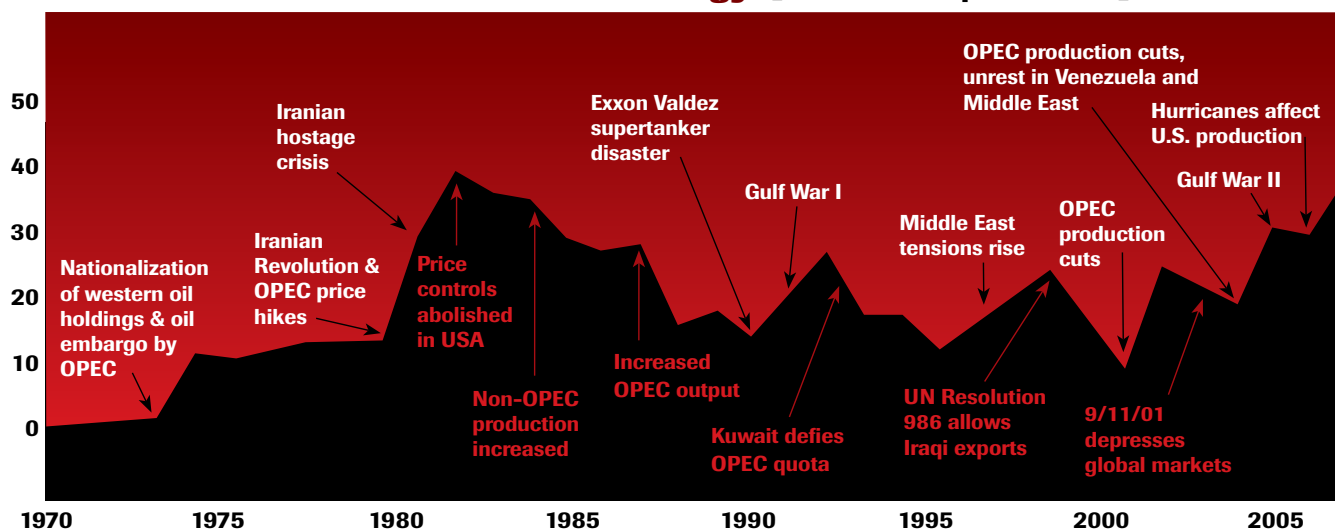
only have to use our big boilers when it gets really cold."

Swanekamp stands by his choice: high-mass, welded-steel, fire-tube boilers that can be turned off for six months of the year without much in the way of thermal shock or corrosion. For Swanekamp, as with most growers, the decision hinged on a simple equation: his high energy bills outweighed the increased boiler maintenance costs, making change the only economically viable option.

## Playing Catch Up

Growers in Europe have long known how to stretch energy dollars to fit tight budgets. Stricter government regulations and higher tax rates have simply left them no choice. In many

**Crude Oil Prices Chronology [1970 to present]**



Source: Energy Information Administration, 2005 review

