



CALIFORNIA  
**Energy Circuit**  
AN INDEPENDENT PUBLICATION

## Overseer's Undercurrent An Even Better Idea

July 21, 2006

Overseer's Undercurrent  
An Even Better Idea

Doesn't it strike you as odd that more than 125 years after Thomas Edison "perfected" the electric light, we still use the incandescent bulb as visual metaphor for a good idea?

The image is everywhere you look - especially in advertising on television, in newspapers, and on the Internet. On the Web page of EmergenceMarketing.com - a supposedly cutting-edge idea factory - there is featured a two-panel promo for The Economist magazine. A street-level billboard portrays a dimmed bulb. As a pedestrian strolls past the sign, the filament lights up above the person's head. "What a brilliant, illuminating idea," exclaims the page.

What a trite metaphor, it might as well have stated.

Looking for a stock photo on the web? Acclaim Images offers more than a dozen for sale, every single one of them representing an incandescent bulb - including a cartoon bulb glowing over the foamy head of a frosty, smiling beer mug. What great idea does that represent? Have another?

A rival stock-photo shop offers search engine keywords to go with its bulbous images: ablaze, aglow, bold, bright, brilliant, clear, glowing, idea . . .

And it's not just a conventional icon; it's an internationally accepted figure of speech. Wayne Lotherington, author of a book called *Flicking Your Creative Switch*, tells us that the idiomatic expression for "I have an idea" in Spanish is "Se me prendió el bombillo" - literally, "My lightbulb went on."

Edison's bulb really does represent a complete shift in the technology of its time. Mary Bellis, an artist and innovator who writes "Your Guide to Innovators" on the Web, described the copper-filament bulb as the consumer interface to an entirely new system that Edison had to invent in order to provide a realistic alternative to the gas lighting that was common in 1879: the parallel circuit and conductor network, an efficient dynamo, voltage regulators, safety fuses, wire insulation, and the socket (lamp) with an on/off switch.

The illuminated bulb concept neatly encapsulates all of those innovations.

The problem is that however fabulous an invention Edison's bulb was for its era, today the incandescent bulb has become a symbol of inefficiency, the status quo, and stagnation of ideas. More than 90 percent of the energy consumed is shed as waste heat, not light. As one proponent of green-building designs recently reflected, more than 40 percent of lighting in commercial buildings is still the incandescent variety. Most of our office buildings feature thousands of little space heaters buried in the ceiling.

What was the latest product innovation for these bulbs? Cool-white frosting on the inside of the glass? How 1950s. Planned obsolescence for the number of hours a bulb will last? Definitely a '60s concept. A three-way bulb? Welcome to the 1970s.

At a conference last week in Santa Fe, Public Service Company of New Mexico chief executive officer Jeff Sterba stood beneath a grand ballroom chandelier, with about a hundred teardrop glass-encased filaments burning brightly above his head as he described trends that are shaping contemporary utility strategies. "How many in the audience still have incandescent bulbs in your homes?" Sterba asked. "Welcome to the energy-wasting society," he declared to the majority who raised their hands.

So it is certainly time to change out this iconic expression of innovation. But with what should we replace it?

The simplest, of course, would be to use compact fluorescent bulbs. They now come in a variety of attractive designs, yet are still instantly recognizable for their function and represent much more efficient use of energy. CFLs also have the benefit of fitting into the standard socket - both in a physical sense and as a mental construct. I have some installed right above my head at this moment, taking on an appealing form of a swirl of luminous ideas.

Others might argue for an even newer generation of efficient lighting technology. Stacey Brydges and colleagues from Columbia University recently gave a presentation at a symposium on teaching science that suggests that the light-emitting diode (LED) should be the new metaphor. With the emergence of LEDs, "educators now have an even more effective pedagogical tool for reinforcing chemical relationships and historical, as well as social perspectives in science," Brydges wrote.

Yeah, but will it work in a cartoon strip?

On TV ads for high-tech gadgets and fast cars, we're likely to see the product against a backdrop of spinning wind turbines and swiveling solar panels, with Koyaanisqatsi skies whizzing overhead and Philip Glass-like music on the sound track. I wholly endorse the use of renewables as metaphor for the new, but wonder: Do the marketers really want to subliminally portray a "life out of balance" theme?

I call that unconscious marketing. Like the GE ad for "clean coal" that employs GAP-like models smudged in coal dust, swinging their hips and picks to the tune of "16 Tons" - a song about how brutal coal mining can be.

Unclear on the concept.

A possibly enduring icon for new ideas is the iPod?. It seems to represent not just a ubiquitous consumer product, but also a whole notion of revolutionary communications technology, of cultural interconnectedness and mobility. The metaphor can be expressed visually without even showing the entire product (white earphone wires or a click-wheel will be sufficient), and it has found its way into everyday language. Podcast, anyone?

I can't help but feel there's something even better. So I've embarked upon a search for this Holy Grail of imagery (there's another hoary metaphor for you, representing a vainglorious adventure that's not likely to end in success).

I figure if there's a new Edison out there, he or she might be in need of some venture capital to bring the next, next great idea to market.

As it happens, there was an Energy Technology Investor conference in town this week, sponsored by the Strategic Research Institute. Several presentations offered examples of emerging companies with products and technologies in the "clean-tech space" - a phrase I heard way too often during two days of PowerPoint slides and social networking.

I found lots of good ideas, but no real prospects for an enduring metaphor for innovation in the 21st century.

If I had money to burn, I might invest in "mutant algae" that eat NO<sub>x</sub> and SO<sub>x</sub> emissions from power plants. There was a promising concept for a disposable fuel cell cartridge that may replace lithium ion batteries in all my consumer electronics - if it doesn't explode on airplanes. There was talk of Fresnel-lens solar collectors that vastly minimize the need for silicon panels. There were electric supercars discussed and synthesized porphyrin molecules described that might someday design and assemble their own silicon memory chips in three dimensions.

Nothing that flicked on the figurative idea lightbulb above my head.

I know there are people who are working on creating the new metaphor, in whatever form it will take. Energy futurist P.S. Reilly, president and chief executive officer of the Athena Institute, reminded us that innovation goes through three stages. First it's dismissed as ridiculous; then it's attacked as dangerous; finally, it becomes accepted as self-evident.

So I'll keep searching for this linguistic Holy Grail. In the meantime, can we at least replace those tiny little heaters in the ceiling with CFLs?

[Arthur O'Donnell](#)