

## Environment & Science

# Do Hive's plasma lights herald brighter days for a greener Hollywood?

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In the film and television industry, talk about sustainability tends to be just another part of the show. But the early success of LA-based Hive Lighting, a baby company growing out of [the city of LA's Cleantech Incubator](#), may suggest brighter days ahead for Hollywood's greening efforts.

In the last year Hive's Arts district warehouse has become a regular pickup stop for shipping agents. Hard-sided plastic cases packed with lighting fixtures headed to or coming from film shoots are stacked 10 feet high in a corner.

Hive's cofounder, Rob Rutherford, regards his product with some envy. "The lights lead very interesting lives. They get to travel the world, meet celebrities and go on adventures," he says. "We mostly just work out of this warehouse."

Hive rents and sells plasma-gas filled capsule lights, configured for film shoots, named for wasps, hornets and killer bees. Rutherford says running a little current through those capsules produces light 2 to 4 times more efficiently than the usual incandescent, tungsten filament lights.

"Our bulb is literally the size of a tic tac, but it's as bright as a street light," he says, holding it between a thumb and a finger. Hive caught a big break last year, when its lights were used by cinematographer Jay Hunter to make Joss Whedon's film [Much Ado About Nothing](#).

Nobody on that shoot was particularly trying to cut pollution. Much Ado was shot on location at Whedon's Santa Monica home. Rutherford points out Hive lights can plug right into a wall, helping the crew avoid noisy, belching diesel generators and trucks outside.

“[Whedon] couldn’t bring a generator in because his neighborhood association wouldn’t let him,” he says. “So he had to run the entire film production off of his house power.”

That’s exactly the type of practical solution Rutherford had in mind as he and co-founder Jon Miller grew Hive out of the muck of the recession.

Five years ago, Rutherford had quit his Hollywood dream job, running financial analyses at a studio. He moved to northern California, helping his father and stepmother sell energy efficient lighting to commercial buildings and parking lots.

Miller was honing his cinematic photography skills on commercials and indie movies with shoestring budgets. And he picked up a lot. “Especially in the last 5-10 years, the emphasis in all production has been doing more with less,” he says. “So, less equipment, less crew, less money, being the operative less that people care about.”

Hive’s cofounders have been tight for over a decade - since a freshman seminar at Brown University (or the party the night before, depending on the version of the story they tell). As Miller climbed the ladder of the lighting department, he turned to Rutherford for newer, smaller, and cheaper options.

“Rob brought me light after light after light. And I was completely uninterested,” remembers Miller. “It was completely ‘Goldilocks and the Three Bears,’” Rutherford interrupts, laughing. “It was either too hot. Too cold. I didn’t like anything basically. And then we stumbled on this new technology called plasma.”

Those bulbs don’t flicker, so they’re good for shooting film off-speed, like in slow motion. Plasma lights also stay cool; you can put them near ice cream, and, importantly, actors.

But how they look is what matters most to guys like Tom Camarda – he’s a director of photography now working on the CBS show *The Mentalist*. He says plasma lights put out nearly the full color spectrum, so they’re a great mimic for daylight. “If I’m on location, they’re great lights,” Camarda says. “For 50% of what we do, we use them.”

They’re not as good for warm light, like candlelight and indoors. “I think the gold standard [for those uses] is tungsten light. Standard filament, good old Thomas Edison. What we’re used to having in our house,” Camarda says. “But they are energy suckers. They draw a lot of power.”

Plasma lights are fast to set up – and Camarda says their cost is easier on the accounting ledger.

“It’s less guys humping heavy cable, it’s less cable, it’s less generators,” he says. “It’s not the first line you see. But it’s a few layers deep that you get the savings. And it’s a significant savings.”

Camarda believes studios and production houses should lead the way on investment in energy efficiency. He’s optimistic that will happen.

But Hive’s not waiting for greener pastures. Jon Miller says for now, plasma lighting sells best simply as a better tool.

“No one gets hired again if they lower their carbon footprint,” Miller says. “Everyone gets hired again if they came in under budget and made a blockbuster film.”

By Miller’s account, that strategy is working. Hive’s finances aren’t public, but its officers say last year the company’s revenue grew by at least a factor of ten over the year before. The forecast for 2014 is boffo too.