

TECHNOLOGY Ideas and products driving local business

Going green means saving green

BY JIMMY HART

The City of Tulsa received high marks from environmentalists last month when it announced a **Green Computing Project** that would automatically turn off employees' computers at night and reduce energy consumption at city facilities.

Along with energy savings, the city hopes to enjoy a financial benefit projected at \$85,000 in reduced energy costs this year and \$123,000 per year going forward.

According to **Brett Fidler**, director of the city's office of sustainability, similar projects that will have both positive environmental and fiscal impacts are still on the horizon. He also said the popularity of these programs is spreading.

"Many local schools and universities have implemented such programs, as well as some industrial entities such as **Lafarge Cement** and **Spirit AeroSystems**," he said.

As more organizations initiate green projects and the corresponding technology continues to advance, more green programs exist that also create a positive impact on the bottom line.

David King is vice president of me-

chanical, electrical and plumbing engineering at the Tulsa office of **Crafton Tull Sparks**, a firm that offers energy auditing among other services. King said there are a number of technologies that can help even small businesses reduce their operating costs.

"A typical building breakdown in energy consumption shows a third of energy goes toward heating and cooling, a third goes to lighting, and a third goes to plug loads, like computers," he said. "If a business can cut as much as 10 percent in each of these areas by using updated technology, then you can see the overall savings can be a substantial 30 percent when totaled together."

Tulsa companies hoping to initiate programs that result in both energy and cost savings may soon have an opportunity for support.

"The city is working toward offering a revolving loan-type program to local businesses for energy efficiency and renewable energy programs and retrofits," Fidler said. "We are developing a funding stream for this project and hope to have it in place next summer."

Some of the technologies businesses can utilize to reduce their carbon footprint while simultaneously strengthening their

finances include:

• **Programmable thermostats:** By setting these controls to the facility's operating schedule, programmable thermostats prevent heating and cooling systems from working overtime and ensure energy and money are not wasted.

"This type of technology saves 8 to 12 cents per square foot of building, and the savings are independent of how many people work for the business," King said.

• **Video conferencing:** Many companies lose money, fuel and time to travel associated with getting employees to meetings. By utilizing video conference capabilities, team members can be a part of the company meeting from any Internet-capable location on the planet without using fuel, racking up reimbursable mileage or wasting valuable work hours behind the wheel or in a plane.

Tulsa-based Internet startup **Withos** has leveraged **Unlimited Meeting** to meet with potential business partners across the country, and company partner **Tom Bay** said the technology is integral part of the young company's ability to maintain growth.

"The decision to video conference was out of convenience at first, but as Withos.

com grows and expands it will have a larger green role and save significant travel expenses," he said.

• **Occupancy sensors:** The sensors can use motion to turn on lights and other environmental controls. Much like programmable thermostats, this technology is focused on not wasting energy on an empty room.

"I would say 30 percent of buildings in Tulsa have varying levels of occupancy sensors to control lighting," King said. "This type of technology can save 12 to 15 cents per square foot of building area."

• **Paperless documents:** Myriad options exist for companies that want to reduce their paper use. Growing in popularity with the emergence of tablet computers, businesses have the option of making any form available digitally. This not only eliminates the need for the paper itself but also for the printing and ink required to produce it and the space eventually required to store it.

Tulsa-based **Litgistix LLC** helps companies eliminate paper waste. **Brian Grossman**, co-owner and chief financial officer of the company, said paperless documents can help companies of almost any size improve their bottom line while making green impact. <<