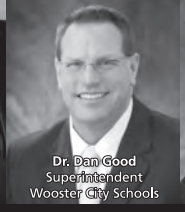
Q4: Senators John McCain and Barack Obama answer questions from these Northeast Ohio municipal leaders.


Chris Galloway
Concord Township Trustee


Steve Hambley
Medina County Commissioner


Dr. Dan Good
Superintendent Wooster City Schools


Brenda Burnham Unruh
Judge Summit County Common Pleas Court


William J. Healy, II
Mayor of Canton


Kandace Jones
Euclid City Council

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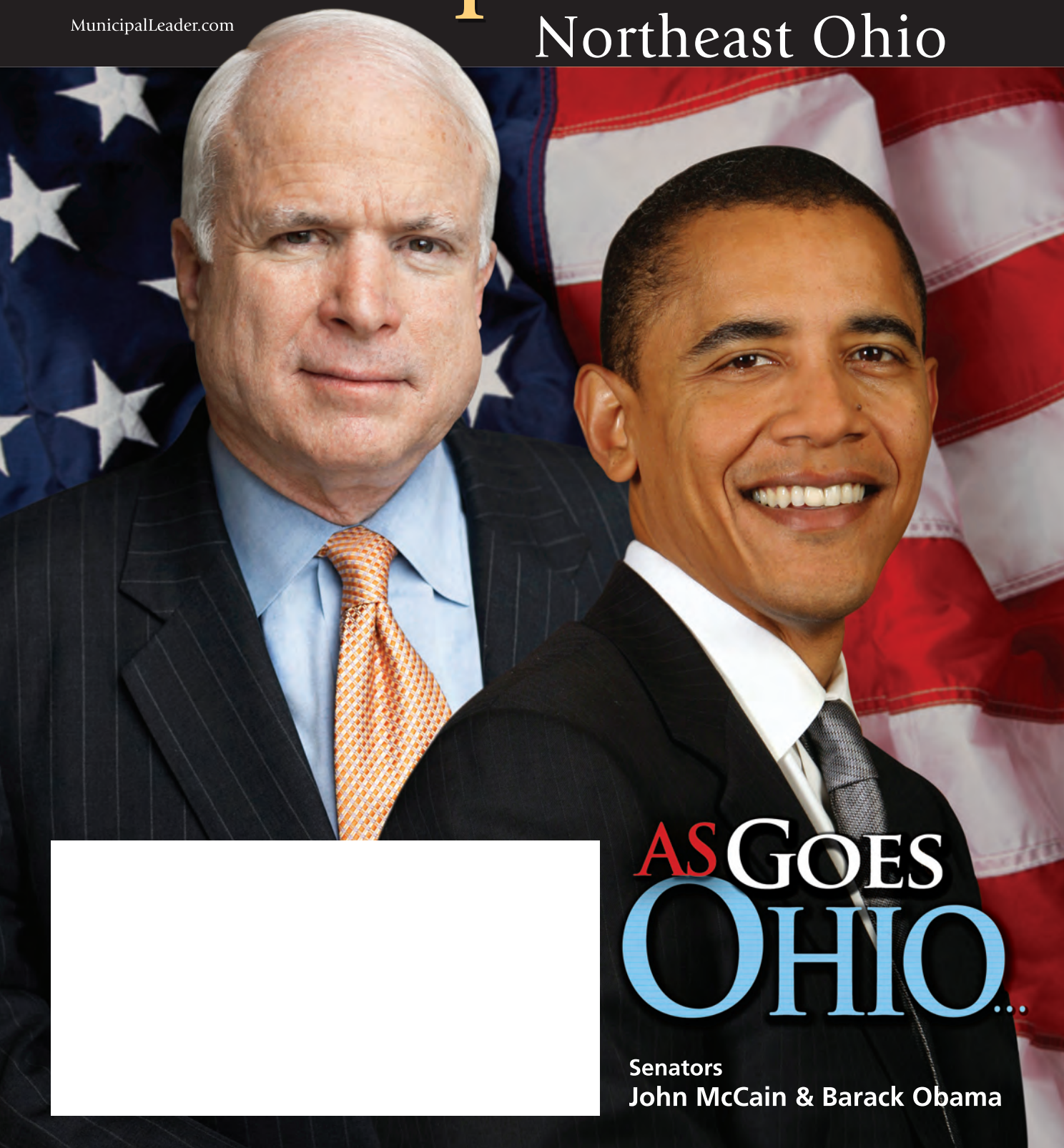

AS GOES OHIO...

Senators
John McCain & Barack Obama

A guide to *Green* Street Lighting

BY JIM HUNT
FOUNDER OF GREENSTREETLIGHTS.COM

In the United States, street lights account for approximately 30 percent of municipal power usage (according to the California Energy Commission) and the use of inefficient street lighting is one of the largest contributors to increased greenhouse gas emissions by municipal governments. One only has to fly over an American city at night to see the proliferation of street lighting that our constituents have come to expect, not only for convenience, but safety. Indeed, in many cities, the first request of an incoming mayor or council member is to install a streetlight outside of a constituent's home. Given this public expectation for well-lit public streets, parks and parking garages, can municipal officials be sensitive to their constituents concerns and mindful of their responsibility to the environment?

A little history may be helpful to see how we arrived at the current state of city street lighting. As electric use spread across cities, the predominant method of wiring a city consisted of a series of poles that followed city right-of-ways to businesses and homes. Given the cost and limited amount of lighting and other appliances at the time, electric providers looked for consistent, predictable uses to expand and pay for the significant infrastructure costs of building and maintaining an electrical grid. Looking upward at the many poles lining city streets, it seemed natural to place incandescent bulbs on arms that extended out over city streets. At first, electric street lighting was confined to business districts and upper income neighborhoods, but it soon spread citywide and became a sign of prosperity to have a street light in front of your house. In turn, electric utilities came to depend on the significant revenue that cities provided and it seemed that America was headed on a path to having every street, park and public place illuminated as a sign of wealth and prosperity.

For many years, electric street lighting consisted of a lone incandescent bulb with a familiar metal shade that was a favorite target of teenage boys with BB guns. This proceeded until around 1970, when various new technologies appeared that featured gas-filled bulbs. The purpose of the new lighting was generally not energy efficiency, but rather a dispersion of light to accommodate the wide streets and faster speeds of new automobiles. When cities looked for more energy efficient products, the answer was generally the high pressure sodium light, which cast an orange-looking light. These high lights offered lower energy consumption at the cost of citizen satisfaction and safety concerns by public safety officials.

After Sept. 11, global warming alerts were prevalent and oil prices exceeded $100 per barrel. Green solutions became the mantra of citizens, businesses, politicians and the media. Respected academics like Stephen Pacala, an ecology professor at Princeton University, raised the awareness of global warming even higher when he said, "We're running an uncontrolled experiment on the only home we have."

Cities across America have made commitments to reduce energy use and move towards a sustainable future. Mayors like Greg Nickels of Seattle, Wash. and Rick Baker of St. Petersburg, Fla. have led the way in making their cities truly green. Many progressive cities have started to look at street lights as a way to reduce energy use. Technology has rapidly advanced and some significant improvements in street lighting have produced alternatives that seem almost too good to be true.

Induction lighting, a technology that is more than 100 years old, became more feasible for street lighting purposes due to reduced cost of manufacturing and the addition of integrated circuits. Because induction lighting does not use an internal electrode, it can last more than 20 years and produces a white light that is very pleasing to the eye. Even more significant, is the energy savings of 30 to 60 percent. Widely used in Europe and Asia, induction lighting is beginning to catch hold in North America. Several major cities are conducting beta tests and other mid-size cities are implementing major re-lamping projects. In addition, several major projects have been installed on military bases and more than 100,000 induction fixtures are currently in use in Mexico.

Another emerging technology is light emitting diode (LED) lighting. LEDs are continuing to improve and have been tested by many cities and other users. LED lighting can be very efficient in getting the light to its target. Like induction lighting, the whiter quality of light is very well received in most applications.

A question may be asked, with the obvious benefits of energy efficient street lighting, why has it not caught on faster in American cities? One answer may be the traditional resistance to change in municipal governments. For example, the corporate behemoth Wal-Mart, adopted a green strategy and literally overnight, became the world's largest retailer of compact fluorescent lights. They learned that if every one of their 100 million customers in the U.S. bought just one energy-saving compact fluorescent lamp instead of a traditional incandescent bulb, they could cut CO2 emissions by 45 billion pounds and save more than $3 billion.

Local governments have the potential to save even more CO2 emissions and billions of dollars through a cost-effective change-over to energy efficient street lights. Can we lead the way to a cleaner, more sustainable environment? It is possible, but we will need to revise our decision processes and become a more nimble creature. A recent analysis revealed that a city the size of Phoenix, Ariz. is spending more than $750,000 per month in excess electric costs and pouring millions of pounds of carbon into the atmosphere for street lighting alone.

This is not a question of buying energy efficient street lighting. Indeed, in 10 years, cities throughout the world will have converted to new technologies in energy efficient street lighting. This is about time. Each month we delay, our environment is being subjected to a barrage of toxic chemicals and harmful emissions. In addition, taxpayers are wasting huge amounts of limited tax dollars on wasted energy.

Municipal officials can lead the way for change. They can lead by example. They can create a vision that enables citizens to invest in a sustainable future for our children. It will not be easy. Municipal decision-making is often mired in the concept of paralysis by analysis. Powerful utility companies are invested in the status quo and unwilling to lose a dependable cash cow. Citizens can be skeptical of change. As we move forward, let us think of this quote by John Scully, former CEO of Pepsi and Apple Computer,

"The future belongs to those who see possibilities before they become obvious."

Jim Hunt is the co-founder of Greenstreetlights.com. He is a six-term councilman and former mayor of Clarksburg, W.Va. He is currently serving as the immediate past president of the National League of Cities and serves on the World Council of the United Cities and Local Governments. He has made a commitment to finding green solutions for cities throughout the world. NEO