

Prepared Remarks of
Dane County Executive Kathleen Falk
National Teach-In on Global Warming
Madison Area Technical College
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Thank you for the kind introduction. I would especially like to thank Madison Area Technical College President Bettsey Barhorst and “MESA”, the student and faculty organization dedicated to sustainability efforts here on campus at MATC, for this opportunity to speak on this most important day where over a million Americans across the United States – from colleges and universities to high schools and middle schools -- have committed to participate in a nationwide teach-in on global warming solutions preparing today’s students to become leaders in responding to one of the greatest challenges any generation has faced.

As you all know, President Barhorst was a charter signatory of the American College and University Presidents Climate Commitment. It is a commitment that has led the tremendous effort underway here at MATC to use energy more efficiently, develop renewable energy sources and reduce the college’s carbon footprint. MATC’s efforts promoting sustainability will help ensure that the Dane County community will produce real reductions in greenhouse gas emissions and shrink its carbon footprint.

Dane County is growing extremely fast – our population and our economy. At the rate we're growing, nearly a quarter of a million more people will call this area home by the year 2050. I think about how my decisions as an elected official today will shape how our Dane County community looks like then and whether our children and grandchildren will have the prosperity and quality of life we enjoy today. That is why I am pleased to speak before you today.

Local governments across America, including Dane County, are on the frontline in the fight against global warming. Cities, towns and counties have laid the foundation for our response to global warming, providing the leadership, solutions and innovation that have helped curb greenhouse gas emissions and reduce energy use.

For example, a few weeks ago, I announced that Dane County and MGE have reached agreement on a new contract to purchase methane-gas generated electricity at the county landfill.

Electrical generation from the landfill gas eliminates the burning of about 16,000 tons of coal annually. If it's left alone and not converted into electricity as is done at the Dane County landfill, methane gas from landfills is expensive to dispose of and about 20 times more potent as a greenhouse gas than carbon dioxide.

Under terms of the new ten-year contract, MGE will purchase 26,000 megawatt hours of electricity generated at the Dane County landfill for nearly \$3-million a year. That's enough electricity to power about 4000 Dane County homes

annually. The \$3-million in revenue will help cover the cost of county services otherwise paid for by property taxes, like sheriff's deputies and services for kids and seniors.

Thanks to this innovative partnership with Madison Gas and Electric, we're taking what's otherwise a terrible pollutant and liability and turning into a moneymaker for taxpayers. This home-grown green energy will make millions of green for our taxpayers and make sure they continue to receive the best public safety and human services available all while better protecting the air we breathe.

I am pleased that President Obama and the new Congress supports investing economic stimulus dollars in local clean energy solutions to quickly create new green jobs, revitalize the economy and promote energy independence.

We are ready to put Dane County citizens to work in jobs that will reduce our dependence on foreign oil and cut greenhouse gas emissions. I look forward to working in partnership with the federal government to put people back to work through local building efficiency retrofit programs, installation of community-scale renewable energy projects, and investments in local mass transit equipment and infrastructure. Cities and counties across America have literally thousands of ready-to-go projects that will help achieve three critical national objectives – create new jobs, increase our energy security and reduce greenhouse gas emissions that cause climate change. Counties across America are taking practical measures to save taxpayers money, reduce pollution, and increase our energy security.

In December, I sent a letter to then President-elect Obama asking he consider including funding in the federal economic stimulus package for green energy projects that will create good paying jobs in Dane County. I specifically asked him to consider the job and energy creation potential of “cow power” in the form of manure digesters that could be located in various parts of the county with concentrations of dairy farms. That odor wafting from over 50,000 cows that make up Dane County’s dairy herd smells like energy independence, economic development and a smaller carbon footprint. Digesters process the manure and convert it into methane and energy, while the byproducts of this process are converted into everything from bedding for cows to potting soil for gardens. Digesters also can remove phosphorous, a significant pollutant, from manure.

Wonderful Wisconsin cows create two products in almost miraculous abundance: milk and manure. Dane County has approximately 400 dairy farms. Every day, cows generate millions of pounds of manure. One healthy dairy cow produces 40,000 pounds of manure annually. That vast quantity of manure contains a very significant amount of potential renewable energy, OR COW POWER, which we can harness with manure digesters. Manure can present farm management and sometimes-severe water quality problems. But, properly handled, it has as many beneficial uses as milk. When processed in properly designed and equipped anaerobic digesters, almost all of the phosphorous is removed from the manure and is available for other uses; clean, useful solid by-products are

created; the resulting methane is used to generate electricity or is converted to natural gas or compressed natural gas.

1 megawatt of “green electricity” with a value of \$900,000 will power over 1000 homes in Dane County. Furthermore, the potential methane emission reduction from eliminating the long-term lagoon storage of the manure is estimated at approximately 19,800 metric tons per year of equivalent CO₂. This is equivalent to the CO₂ emissions from driving approximately 50 million miles/year at an average fuel economy of 25 miles/gallon.

From a farming perspective, the digester substantially lessens the need to store manure in large, extremely expensive facilities and to spread the manure, which requires a lot of land and generates environmental problems, especially if spreading has to occur in the winter or spring. Because of the carbon released by untreated manure, digesters are also recognized for their contribution in controlling greenhouse gases and are eligible for carbon credits. Finally, digesters are relatively complex operations that require skilled, well-paid construction crews to build and skilled, well-paid technicians to maintain. They are a great source of green, great-paying jobs. Each digester creates about fifteen to twenty construction jobs during its twelve to eighteen month construction period. Each requires at least two technicians. Finally, each will generate additional jobs, depending on the type of material produced at each facility (for example, packagers of potting soil or haulers of phosphorus).

Currently, some large (over 1,000 cows) dairy operations are investing in digesters, often with some form of public assistance. However, the upper Midwest has thousands of small to medium-sized farms, which, on their own, will probably not be able to afford digesters for many years. Dane County is addressing this opportunity with a pilot project for a cluster of neighboring farms to develop and operate a digester on a cooperative basis. When successful, this is a model that can be replicated throughout the Upper Midwest, with the results of lots of sustainable energy, reduced air and water pollution, more financially secure farms, and many new jobs. The current site of the county's work is the Lake Mendota watershed, just north of Madison. We are working on what's believed to be the first "community" digester in the country in that it would link several farms in an area near Waunakee. In addition to successfully completing a thorough feasibility study for this project, we have budgeted \$1.1 million to complete technical and business plans for the facility and participate in the financing should that prove necessary.

We believe a second site is ripe for development in the Black Earth Creek watershed. Black Earth Creek is a nationally recognized trout stream imperiled by manure runoff. The surrounding dairy farms tend to be smaller than in the northern part of the county and, as part of the Upper Midwest's Driftless Area (which includes southwest Wisconsin, northeast Iowa, and southeast Minnesota), these farms are located in steep terrain with a world-significant occurrence of spring-fed streams. A Black Earth Creek manure digester will improve

replicability of digesters with all their benefits in a big chunk of the Midwest as well as protecting a natural resource of national and unquestioned value.

Construction at the Waunakee site should start late in 2009 or early in 2010. This is an aggressive schedule, and there are still a lot of questions to be answered; this project is something that has many benefits that I am very committed to seeing completed.

Just think of the list of benefits -- 95% of phosphorous kept out of the lakes; better manure management for the farmers; significant additional farm revenue; locally produced, sustainable green energy; local, good paying jobs for constructing and operating the digester and significantly reduced greenhouse gas emissions. This is a harvest we should reap.

In addition to over \$1 million dollars for our Cow Power program in the recently passed County budget, here are a few additional budget highlights that will produce green jobs, green energy and a smaller carbon footprint:

- 1) The County is constructing a replacement long-term care facility at the Badger Prairie Health Care Center. The \$1.1 million heating and cooling plant for the new facility will be geothermal. The geothermal system has the potential to offset 63,000 therms of natural gas consumption annually, saving approximately \$80,000 per year.

- 2) City-County Building Solar Hot Water Project will supply 50% of the City-County Building's hot water. The City-County Building is a 463,000 square foot building that houses Dane County and City of Madison administrative offices, a juvenile detention facility, and a maximum-security adult detention facility on the 6th and 7th floors. The solar hot water project will save approximately 3,000 therms of natural gas and generate \$3,000 of annual energy savings per year.

- 3) The Dane County Regional Airport will purchase an additional 22.4% of its electricity from alternative energy sources at an estimated cost of \$18,700.

- 4) The \$100,000 Energy Independence and Sustainability Project Fund that will pay for energy efficiency, alternative energy, and sustainability initiatives that will be investigated throughout the year.

- 5) The Renewable Energy and Alternative Fuels Feasibility Study will assess the feasibility of wind, biomass, and solar energy sources, as well as complete an assessment of fleet vehicles and develop a strategic action plan for implementation.

And finally I must say few words about the cars and trucks we drive. In Dane County, and in so many regions in the U.S., greenhouse gas emissions from the transportation sector are the single biggest source of global warming pollution.

The transportation sector is responsible for nearly one-third of CO2 emissions. The single biggest factor in the amount of transportation pollution is the number of vehicle miles traveled. Where we choose to live and how we choose to get to school and work determines the size of our carbon footprint. Dane County is growing at a pace of about 60,000 people every decade. With that kind of growth we need new transit options such as commuter rail. Without those kinds of alternatives we'll be left with more congestion and pollution. That's why a decade ago we started a conversation in the county about the most efficient, practical ways to get people from "point A to point B" in the coming years, given our area's rapid growth.

Studies show that if one solo commuter switches from driving to transit for their daily commute to work, he or she can reduce their household carbon footprint by 10 percent or the equivalent of more than 4,800 pounds of CO2 for an average commute each year. If the same commuter rides transit to work and their household gives up a second car, a family can reduce its total carbon footprint by up to 30%.

We now know enough about global warming that there is no reason why we do not have the responsibility to solve it. The decisions we make today about the threat of global climate change will most certainly shape the world of future generations. I am confident that future generations will not blame us for being "too late."

We are all part of the problem so we must all be part of the solution. Riding to work with a neighbor or friend, hopping a bus, changing out old light bulbs, and buying energy efficient appliances are little things we all can do to be part of the solution. If everyone makes even a few little changes in their daily routines.... together we can accomplish a lot.

Each of us should take a minute to ask ourselves....what are some of those little things we each do to help make this a cleaner, healthier, and happier place?

Global warming can no longer be dismissed as a theory that some just roll their eyes at. It's reality. It's happening...and all of us through our actions and our words need to make sure the message is heard loud and clear that we're committed to doing something about it....and we want something done about it.