

Jan. 14, 2014

To: Ald. David Ahrens, District 15, and interested parties

From: Warren Gaskill, Managing Partner, Rapid Improvement Associates, LLC

Re: Building Energy Use Benchmarking/Economic Development

The transition toward making the energy use of buildings more easily visible and understood is advancing rapidly on a variety of fronts nationally as we face the ever more obvious need to bring our human economy into better sync with Earth's natural economy.

To highlight just two significant trends:

- Utilities and public services commissions are implementing time of use rates to help level frequency of expensive energy use peaks.
- Energy use grids are being enhanced to accommodate use of variable energy sources, such as that from the ever more cost-effective sources of solar and wind.

Concurrently, some utilities and related service providers are making it much easier for businesses and homeowners to understand their real time energy use patterns, enabling them to be more proactive in taking action to reduce both their financial costs and associated environmental costs of the greenhouse gases produced through fossil fuel.

To date, at least 50 utilities and energy providers nationally – including Austin Energy in Texas and Commonwealth Edison in Chicago – have implemented, or committed to implementing, programming to make it simple for customers to have access to their monthly energy use and cost, allowing them to compare the trends of current use with past use or to compare their energy use to their peers nationally.

And well over 60 companies nationally have, or are developing, services that use what is termed the "Green Button" data to help choose economical rate plans, deliver customized energy-efficiency tips, provide easy-to-use tools to size and finance rooftop solar panels, or conduct virtual energy audits that can cut costs for building owners and speed the initiation of retrofits.

The City of Madison can take a simple, but important step in taking advantage of this transition by adopting an ordinance that will implement reporting of energy use performance for larger properties. Building energy-use benchmarking – just like the real-time miles per gallon technology in cars these days -- sets the stage for the next key step: taking action in minor and major ways to become more energy efficient.

Overtime, the ordinance can help enhance development of related businesses, save money, and reduce reliance on fossil-based fuels – all supporting a more resilient economy capable of standing stronger in the years ahead.

Some 70 leading businesses in the City – primarily through Sustain Dane's Mpower Business ChaMpions program – have taken advantage of this opportunity, and can

testify to the many benefits they have achieved. A City of Madison energy performance benchmarking report requirement will help raise awareness among many others in the city, helping speed and spread these effective lessons learned by others.

Our firm, Rapid Improvement Associates, LLC, is Dane County-based consultancy that has worked in this field across the state and nationally for the past half-dozen years. Local project partners using our Energy Stewards® web platform as a part of their energy management programs include the City of Madison (50+ properties), Sustain Dane's Mpower Business ChaMpions, and the Middleton-Cross Plains Area School District (12 properties). The web platform – engineered by Hiebing of Madison -- and the energy use performance metrics are fully integrated with ENRGY STAR Portfolio Manager®, the nation's leading energy performance benchmark for buildings.

From our experience, we know that energy use updates can be made relatively painless for businesses via simple utility downloads or automatic data exchange links with ENERGY STAR Portfolio Manager.

And, from our experience, we know that a requirement to pay attention (in the ordinance, at a minimum, report annually) is really a helpful if not a necessary ingredient of driving efficient and effective improvement.

To date, there are just 44 buildings with 5 million square feet in the City of Madison that have been formally ENERGY STAR certified. (Eighteen of these are school buildings). According to ENERGY STAR, "On average, these buildings use 35 percent less energy and cause 35 percent fewer greenhouse gas emissions than comparable buildings across the country. Academic studies also show that ENERGY STAR certified buildings are more valuable — commanding higher rents and sale prices, among other benefits."

The proposed ordinance for Madison can be win-win-win: A win for the businesses that take action to improve energy use efficiency, a win for the utilities that don't have to provide additional production capacity, a win for the local businesses providing energy efficient products and services, and a win for our community as a whole, in the near term and for future generations.

Thank you for sponsoring this ordinance. Please let us know if there are ways in which we can support its adoption and successful implementation.

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