Economic Impacts of Energy Use Disclosure Ordinances

December 2014

By Shari Awalt & Kimberly Kruse



Figure 1

CURRENT STATE ANALYSIS

Energy generation and use are at the forefront of the sustainability movement of the 21st century. For solutions, many cities and states are looking to energy efficient buildings as a way to reduce carbon emissions and contribute to city sustainability goals. Thus, they are investigating the benefits and impacts of the development and implementation of Energy Use Disclosure Policy.

Our research identified possible economic value drivers, and our analysis determined the benefits, best practices, and challenges involved with these ordinances. City councils and states can use these findings in the development and successful implementation energy rating and disclosure policy.

- Buildings are the single largest user of energy and account for over **40%** of total consumption in the U.S.
- Currently 28 cities, states, and counties have energy ratings and disclosure ordinances and ten more are considering them (Figure 1).
- These policies impact almost 6 billion sq. ft. of floor space in 12 major real estate markets, a powerful incentive.

SUGGESTED TOOLS

EPA's Energy Star Portfolio Manager which is FREE is the most common tool with 40-50% of U.S. commercial building space benchmarked using it.

IMPLAN is a highly accurate and adaptable economic model to calculate direct, indirect, and induced employment and related benefits.

Economic Impacts of Energy Use Disclosure Ordinances

Building Owner Benefits

Lower Operating Costs - 8-9% reduction = \$3.8 billion through 2015, \$18 billion through 2020 **Higher sale** prices – up to 7.5% in sales price for each dollar invested ✓ Higher rents - Energy Star, LEED and Green Starrated buildings typically command rental premiums up to 17% higher

> Source: World Green Building Council

ECONOMIC VALUE DRIVERS

A natural market effect can be seen in this Energy Rating and Disclosure Cycle of Improvement (Figure 2). When ratings are disclosed to the markets for comparison, less efficient buildings are less appealing so building owners are encouraged to improve efficiency with better management and capital investments in equipment and building quality. These changes drive competition and create demand for buildings with higher efficiency ratings, so the building stock is continuously improving. And these buildings are rewarded with lower energy costs, higher occupancy rates, higher resale values, and higher rental premiums. Another circular effect is that of indirect value where money is funneled into energy-related industries and businesses and induced value where money comes out of the energy sector into non-energy sectors from savings, higher earnings, and discretionary income.



Disclosure can also spur business development by exposing risks and revealing new strategic direction and new opportunities for innovation in products and services. This pro-business environment is materializing without the need of public investments or subsidies.

A recent study showed that \$1 million invested in energy efficiency created 16.7 jobs compared to 5.3 jobs for fossil fuel investment (NEEP 2013).

Energy-related Job Creation

- Non-Residential repair
- New Commercial & Industrial
- Retro-commissioning & Retrofitting
- Auditing & Appraising
- Energy Management
- Hourly Mean Wage: \$21.05
- Annual Mean Wage: \$43,790 (IMT; PERI 2012)

NEXT GENERATION OF WORKERS

Sustainability is an important factor in acquiring talent and leads to higher levels of engagement on the job, particularly among millennials who want to make a difference through their work. In fact, Johnson Controls found that 96% of Generation Y respondents are highly concerned_about the environment and expect employers to take steps towards becoming more sustainable.

Additional Sources: http://www.sustainablebrands.com/news_and_views/jul2012/employee-engagement-key-sustainable-success

http://www.neep.org/sites/default/files/resources/BER%20Supplement_FINAL%20DRAFT_2-25-13.pdf