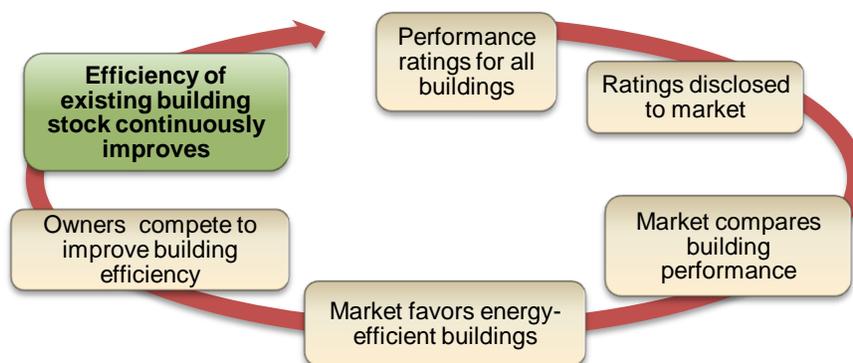


## Rating and Disclosing the Energy Performance of Buildings: A Market-Based Solution to Unlock Commercial Energy Efficiency Opportunities

With climate protection and energy security issues at the forefront of global politics, improving the energy efficiency of existing buildings is emerging as a central goal for policymakers. In the United States, buildings account for nearly 40% of greenhouse gas emissions,<sup>1</sup> about half of which are from existing commercial buildings.

For better or worse, the buildings of tomorrow are mostly here. According to statistics from the U.S. Department of Energy, only a quarter of existing commercial buildings were built in the past 10 years, while 40 percent are more than 30 years old. In New York City, where commercial and multifamily buildings account for 80 percent of city greenhouse gas emissions and \$15 billion each year in energy costs, 85 percent of buildings standing today will still be around in 2030.<sup>2</sup> Our ability to make meaningful reductions in building energy consumption depends on unlocking efficiencies in existing buildings. But how do we do this?

**Figure 1: Rating and Disclosure Cycle of Improvement**



An emerging solution is to comparatively rate and disclose the energy performance of buildings. Rating and disclosure policies can unleash the market’s ability to encourage efficiency improvement by increasing building energy transparency. In the auto industry, consumer demand has sparked fierce competition among automakers to build smaller, fuel-efficient vehicles. But imagine if consumers didn’t have miles-per-gallon efficiency data. Demand for fuel-efficient vehicles would likely be much less.

Right now, commercial real estate consumers – including tenants, investors and lenders – aren’t being given building energy performance information. They can’t compare the energy

<sup>1</sup> Energy Information Administration. *Emissions of Greenhouse Gases in the United States 2008*. Table 6

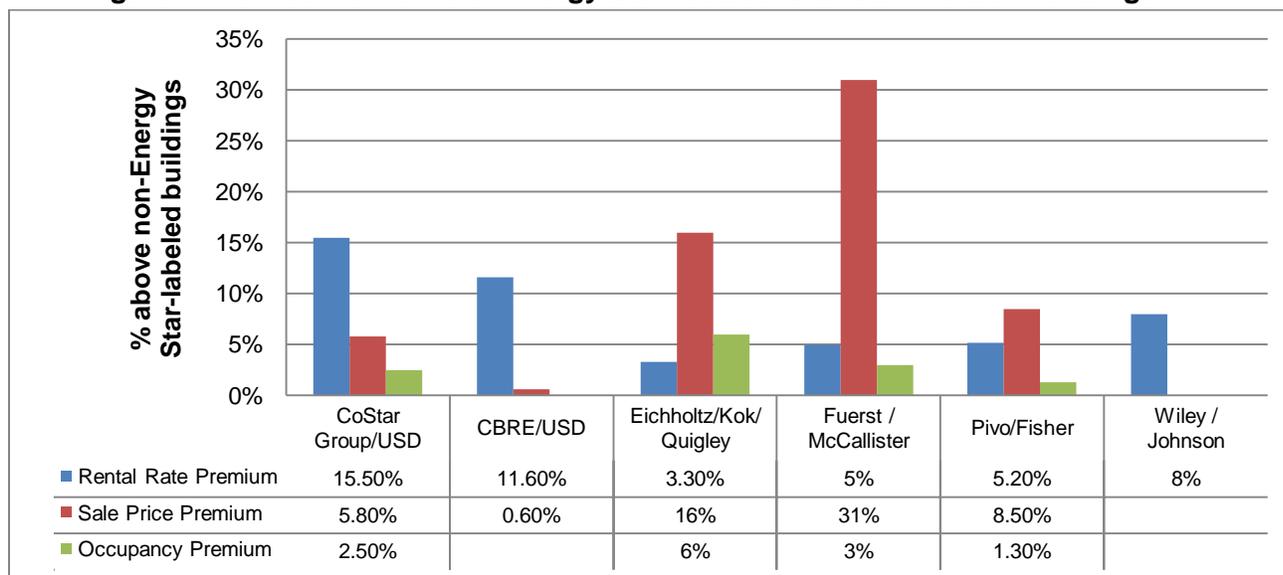
<sup>2</sup> Statistics from New York City PlaNYC report

performance of properties and as a result, there is little demand in the market for energy-efficient buildings and little competition between owners to improve building efficiency. The market forces that should be driving investment in efficiency are absent.

Mandatory rating and disclosure policies will close this information gap, allowing real estate consumers to recognize efficient buildings and reap the benefits. For owner-occupiers, increasing energy efficiency reduces utility costs and increases profitability. For investment owners, increasing efficiency can lower tenant utility bills, increasing the marketability of rentable space. These competitive advantages can translate into other benefits with investors and lenders, such as higher building sale prices and better financing terms. As demand for efficient buildings increases, less-efficient buildings will come under competitive pressure to improve their energy performance. The result is a virtuous cycle that lifts the efficiency of the entire building stock – and lowers energy bills – as owners vie for competitive advantages related to energy efficiency (See Figure 1).

In fact, evidence suggests that this market transformation is already underway. Since 2008, six studies comparing Energy Star-labeled commercial buildings<sup>3</sup> in the United States to similar, non-labeled buildings have revealed competitive advantages for Energy Star buildings in the areas of occupancy, rental rates and sale prices (see Figure 2).

**Figure 2: Market Premiums of Energy Star-labeled U.S. Commercial Buildings<sup>4</sup>**



In the current marketplace, the disclosure of ratings is voluntary and likely occurring for only the most efficient buildings – a tiny slice of the overall commercial building stock. Demand for efficient buildings may become even greater as market transparency increases and ratings for less-efficient buildings become known. The mandatory disclosure of low ratings will also

<sup>3</sup> The U.S. Environmental Protection Agency’s Energy Star label is a voluntary program recognizing the top 25 percent most energy-efficient properties in the United States.

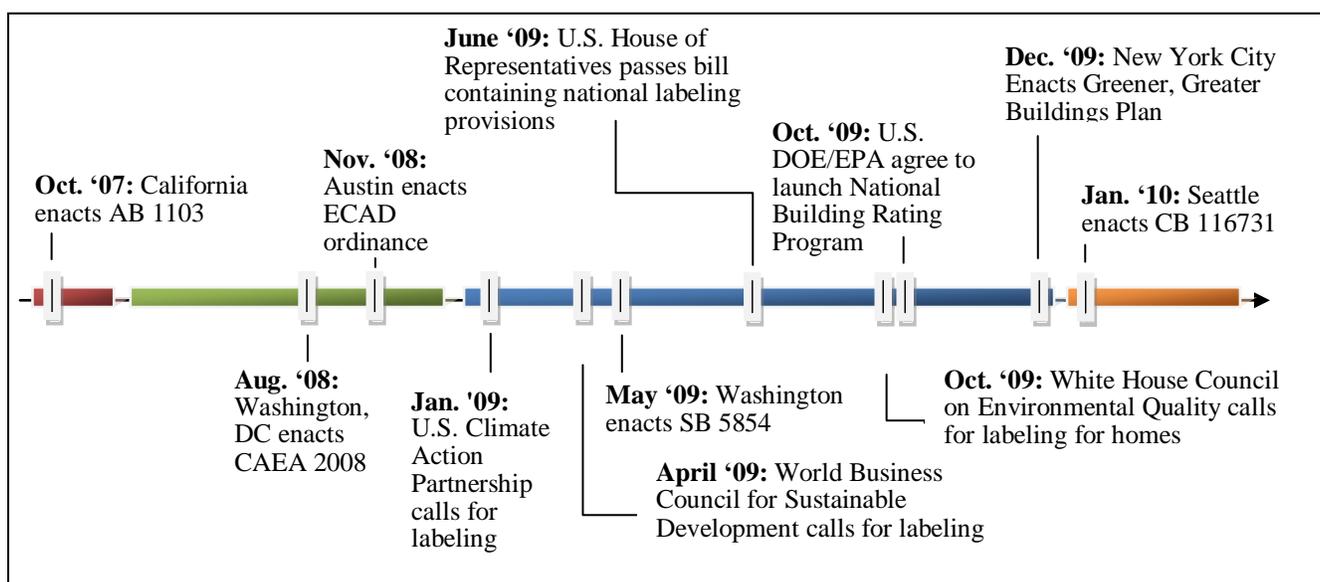
<sup>4</sup> See [www.imt.org/rating-value](http://www.imt.org/rating-value) for more information

increase the accountability of architects and building operators for poorly performing buildings and help governments and utilities create more effective incentives and policies.

Recognizing all of these benefits, policymakers around the world are moving swiftly to require energy performance rating and disclosure for homes, commercial buildings, or both. Mandatory energy rating policies are now in place in more than 30 countries worldwide<sup>5</sup>, including the European Union. Australia, which has longstanding policies requiring energy performance rating and disclosure for homes, approved a commercial building rating and disclosure policy in 2009 that will become effective in late 2010. The central government of China is piloting an energy label for commercial and multifamily buildings in 11 cities and seven provinces.

Policies are also emerging in the United States. Six states and major cities, including California, New York City and the District of Columbia,<sup>6</sup> have enacted commercial rating and disclosure mandates. Other states and cities appear ready to follow, and the U.S. Department of Energy recently launched the National Building Rating Program, a joint effort with the U.S. Environmental Protection Agency to develop a standard building energy label and rating methodology for homes and commercial buildings (see Figure 3).

**Figure 3: Timeline of U.S. Rating and Disclosure Events**



*The Institute for Market Transformation (IMT) is a Washington, DC-based nonprofit organization promoting energy efficiency, green building and environmental protection. IMT provides technical and policy guidance to federal, state and local policymakers on building performance rating and disclosure mandates. For more information, please see [www.imt.org/benchmarking-and-disclosure](http://www.imt.org/benchmarking-and-disclosure).*

<sup>5</sup> From the report *Valuing Building Energy Efficiency Through Disclosure and Upgrade Policies: A Roadmap for the Northeast U.S.* by Dunsy Energy Consulting and the Northeast Energy Efficiency Partnerships, 2009.

<sup>6</sup> The others are Washington state; Seattle, Wash.; and Austin, Texas