

Disclose Building Energy Performance (Rating/Label)

POLICY DESCRIPTION

Building owners could be required to disclose the energy performance of their buildings using a common rating or label. Rating systems typically use a combination of energy use records and in-person audits to develop a performance "score" (sometimes accompanied by a more detailed assessment) that enables comparison of buildings. Ratings typically must be performed at either building time-of-sale or by a certain date and then disclosed to prospective buyers or tenants or to the general public. Performance-based rating systems exist for both residential and commercial buildings, and several options are currently used (or in pilot phase) around the country. This option could also be implemented as a voluntary program and coupled with upgrade incentives and financing mechanisms.

POLICY OBJECTIVE

To increase information available to building owners and occupants, create a mechanism for market differentiation, help identify opportunities for efficiency gains, and encourage voluntary upgrades.

SUMMARY OF CRITERIA RATINGS (★★★★★ = best/most feasible)

Energy Efficiency Potential

★★★

Cost of Policy Implementation

★★★

Economic Benefit

★★★★★

Administrative Feasibility

★★★

INDIVIDUAL CRITERIA RATINGS

ENERGY EFFICIENCY POTENTIAL

Rating: ★★★

- **Broadly applicable across sectors and measures:** An energy performance rating is equally applicable to both residential and commercial building types. Policy applies equally to all fuels (gas, oil, steam, electricity) and could include all measures for each fuel type.
- **Low to moderate incentive for measure implementation:** Effectiveness relies on the marketing value of the rating or label to motivate building owners to pay for the efficiency upgrades. Labels such as LEED and ENERGY STAR typically provide requirements for efficiency for various end uses and measures, so some direction is provided on which measures need to be installed. Tying this policy to financial incentives or mechanisms to help pay for these measures could result in greater energy efficiency potential.

ECONOMIC BENEFIT

Rating: ★★★★★

- **Moderate economic potential:** The broad range of applicable measures and the specificity of the checklist in providing direction as to what measures need to be installed provide a modest amount of efficiency potential. This results in a moderate amount of potential economic impact. Based on the economic impact modeling, this policy ranked in the upper third of policies reviewed in terms of potential economic output and jobs.
- **Applicable to all sectors.** This policy could be feasibly implemented in both the residential and commercial sectors. Specific industries that would receive economic benefits include installation contractors for the various measures (lighting, AC, heating, etc.). The general economy would also benefit from increased spending and business output resulting from reduced energy bills. There are little or no manufacturing benefits expected from this policy as all measures are likely manufactured outside the Seattle city limits.
- **Job growth to the energy auditor industry.** Requiring assessments of building performance would encourage growth in the number of energy auditor jobs.

COST OF POLICY IMPLEMENTATION

Rating: ★★★

- The total cost to city and partners of establishing this policy is estimated to be \$180,000 - \$450,000.
- **Assessment of existing rating systems: \$50,000 - \$200,000.** Experience to date has indicated that existing rating systems must be vetted in the marketplace before making mandatory. ENERGY STAR is well-established for commercial buildings. A current pilot in Portland, Oregon may help shorten the development time for residential ratings, but extensive work might still be needed.
 - **Development of database: \$100,000 - \$200,000.** A public database could be developed to house and provide access to the ratings. Alternatively, existing databases (such as the Multiple Listing Service or EPA's Portfolio Manager) could potentially be leveraged for residential and commercial ratings, respectively.
 - **Legislative development: \$30,000 - \$50,000.** City staff and legal counsel would need to develop the policy specifics and legislation. Much of this work could be done within existing staffing levels, meaning few new resources needed.

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(continued)

INDIVIDUAL CRITERIA RATINGS (CONTINUED)

ADMINISTRATIVE FEASIBILITY

Rating: ★★★

Establishing a requirement for building energy performance is generally quite feasible, if potentially lengthy.

- **Most jurisdictions have taken at least a year to study similar policies.** The steps discussed above under *Cost of Policy Implementation* can take one to two years (or more) to test models, establish in-person audit and historical data procedures, and iron out details.

- **Privacy concerns can raise legal questions that are usually surmountable.** The development of a performance rating would likely require at least 12 months of energy use data. Any mandate that requires public disclosure of customer data (via utilities) or compromises landlord-tenant privacy could raise potential concerns. Most existing programs have avoided the most significant legal hurdles by carefully developing disclosure agreements, limiting any public disclosure to the end ratings and not the input energy use data, and by limiting the scope of the mandates for particularly challenging sectors (e.g., commercial tenants).

- **Compliance mechanisms may be needed, but potentially difficult to enforce.** If disclosure is mandated, an enforcement mechanism will need to be defined and a public authority must be in charge of monitoring compliance.

STAKEHOLDER IMPACTS

This policy is expected to have the greatest impact on homeowners but the effects can likely be mitigated:

- **Residential homeowners** would be affected financially, as the cost for a performance rating varies between \$150 and \$700, depending on the complexity. Owners could also be impacted by a policy that required disclosure at time-of-sale, which could potentially delay a transaction, although some jurisdictions allow this responsibility to be transferred to the buyer. Similarly, **realtors** could be impacted if their clients' sales are delayed or otherwise affected, but some realtors have used energy performance ratings to help differentiate their clients homes in a tight market. Homeowners (and realtors) could also benefit from higher sale prices for higher performing homes.

- **Commercial building owners** would be similarly affected, although many building owners already use Portfolio Manager. Obtaining the ENERGY STAR performance rating requires the stamp of a professional engineer, which would require some cost. In cities throughout the country, building owners have generally recognized the value in performance audits, particularly systems such as Portfolio Manager.

- **Low-income homeowners** could face particular difficulty with the cost of required performance audits. On the other hand, low-income tenants would stand to benefit by lower utility bills and greater knowledge about the energy use of prospective rental units. Consideration and quantification of utility cost savings and offering of low-income exemptions have generally been important considerations for low-income residents and their advocates.

ADDITIONAL LESSONS FROM OTHER JURISDICTIONS

The following jurisdictions have established a requirement for disclosing building energy performance:

- **The State of California.** -- Will be requiring commercial buildings to use Energy Star Portfolio Manager and disclose results to a prospective buyer, lessee, or lender (effective 2010). Their companion residential bill is not likely to pass, but will likely be reintroduced during the 2009 legislative session.

- **Washington, D.C.** -- Will be requiring commercial buildings to use Energy Star Portfolio Manager and publicly disclose results. The bill is modeled after the California legislation.

- **Boulder County, CO**--Follow-up after audits has been very important. Audits are tagged with upgrade/ technology subsidies and educational resources to do self- improvements or to select a pre-approved contractors.

In addition, several other jurisdictions are considering energy performance ratings. Among them:

- **New York City** is considering a requirement that commercial buildings over 50,000 sq. ft disclose energy use annually in Portfolio Manager. Portfolio Manager ratings (not energy use) will be made public on the City's web site.

- **Portland, OR** is considering a similar requirement for commercial building owners to use Portfolio Manager for buildings over 20,000 square feet.

- **Washington State's** Climate Action Team is investigating a state-wide benchmarking requirement for commercial buildings using Portfolio Manager.

Key lessons learned:

-- Energy Star / Portfolio Manager has wide acceptance and is likely the best starting point for a commercial building rating. However, LEED-EB and ASHRAE 100 are also mentioned by some cities as contenders.

-- Approaches to residential homes vary widely and many are still in pilot. The Home Energy Rating System (HERS), the National Energy Audit Tool (NEAT), and the Energy Performance Score (EPS) ratings are considered the leading models for existing-home residential ratings at this point.