



City of Boulder SmartRegs Case Study: Executive Summary and Policy Recommendations.

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Submitted to

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EXECUTIVE SUMMARY

Based upon this SmartRegs case study and the cost data provided in this report, achieving a Home Energy Rating System (“HERS”) Index Score of 120, (or the equivalent of 20% less efficient than the 2004 International Energy Conservation Code (“IECC”)), is both realistic and obtainable for most properties in the City of Boulder.

In order to provide both a performance (HERS rating) and prescriptive pathway to SmartRegs compliance, Populus developed a prescriptive points pathway that is weighted such that achieving 100 points is roughly equivalent to achieving a HERS Index Score of 120 or 20% *less efficient* than the 2004 IECC (with some variations because the prescriptive pathway is more carbon-focused than HERS rating). A proposed home size adjustment has also been included in this report, which helps normalize the prescriptive pathway based upon overall carbon emissions. If a home size adjustment is adopted, the performance pathway should be adjusted as well (since small and large homes can achieve HERS 120 while having radically disparate carbon emissions).

SUMMARY OF POLICY RECOMMENDATIONS

- While a prescriptive pathway is recommended due to cost considerations, an energy audit (including at least a blower door test and a duct blaster test) should be mandatory under the SmartRegs program. Requiring energy audits not only provides a benefit to the homeowner, but also provides data to the City of Boulder for measuring energy savings attributable to the program.
- Our recommendation is to phase-in the implementation of the SmartRegs program prescriptive pathway by capping the total number of improvement points that would be required during any given rental cycle (the performance pathway could likewise cap the maximum HERS score improvement in any rental cycle).
- While carbon offsets are generally disfavored as a policy approach, they may be useful as a “bridge” to phase-in program implementation. For example, the City of Boulder could require that any initial rental cycle prescriptive point's deficit (below 100) be “made up” with the purchase of carbon offsets. The Colorado Carbon Fund provides high quality carbon offsets to consumers as a way to support new energy efficiency and renewable energy projects.
- In regards to financing, many programs such as Boulder County's ClimateSmart Loan Program, the proposed Home Star program and private loans may be available to help property owners pay for upgrades. There are currently utility and governmental rebates for efficiency upgrades available as well. In addition, renters may be eligible for low-income weatherization funding, which would defray landlord costs. Even with these programs available, there needs to be a financial hardship waiver that landlords can use to request a reduction or a “pass” for the first rental cycle (or at least allow the landlord to purchase offsets instead of upgrades).
- To address concerns regarding occupant behavior, landlords could be given one prescriptive point towards SmartRegs energy efficiency compliance if their tenants attend an energy conservation workshop. In addition, an energy conscious lifestyle handbook should be developed in conjunction with the University of Colorado that will help tenants understand the importance of energy conservation.
- To encourage market-based incentives to energy efficiency, the City of Boulder's rental policy should require landlords to disclose average utility bills when renting a property. Landlords should be encouraged to insert a standard clause into all future rental leases that permits the City of Boulder or some other entity access to utility data in order to compare past energy consumption with that of post-improvement to allow tracking of SmartRegs program effectiveness.

The complete report can be found at www.bouldercolorado.gov/smartregs