

Report and Results from the June 16, 2009, Green Building Stakeholder's Forum

City of Hailey and Blaine County Planning and Zoning Departments

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SUMMARY

On June 16, 2009, the County's Build Smart Committee and the City of Hailey's Sustainable Building and Planning Committee co-sponsored an outreach event for professionals from the Wood River Valley's building and design industry. A key component of the event included a facilitated stakeholder's forum. The forum addressed four key policy issues: 1) mandatory vs. voluntary programs; 2) addressing home size; 3) third party vs. in-house inspections; 4) improvements to the existing building stock. These issues have been identified by both the city and county committees as controversial policy issues with regards to recommending an above-code standard. The forum utilized the Delphi and Nominal facilitation methods to bring together approximately 35 stakeholders representing various views to systematically facilitate discussion as well as identify divergence of opinion, areas of compromise, and to generate additional solutions.

The information gathered from the four different stakeholder groups indicates common support for the following: 1) a mandatory approach, if it is incrementally implemented and allows for flexibility, such as a mandatory 3rd party certified, Home Energy Rating (HERs) program that incorporates home size; 2) 3rd party certification if fees are minimized in some way and the cost is incurred by the owner/developer; 3) a green building program that tackles improving the energy efficiency of the existing building stock through incentives and/or energy audits; 4) utilization of energy audits to identify and prioritize where energy efficiency retrofits will be most needed 5) Reducing the energy, water, and material resource consumption of larger homes, without over-penalization of the owners/developers of such homes.

Utilizing the general sentiments and priorities expressed by forum participants, County and City staff generated a list of "*Strategies for Committee Consideration*" for both the city and county committees to reference when developing their recommendations. This list provides further expansion on the process and implementation components needed to accommodate each of the forum groups' stated goals and priorities.

INTRODUCTION

The City of Hailey's Sustainable Building and Planning Committee and Blaine County's Build Smart Committee were established in November of 2008 and February of 2009, respectively. Each committee has been meeting regularly to gather information, research, and provide education and outreach on various green building programs, methods, and techniques, in an effort to develop recommendations for Hailey's City Council and Blaine County's Board of Commissioners. Developing a broader, more comprehensive range of green development incentives and requirements is a large task, which requires buy-in from the building and development industries, as well as the public at large. Both committees have made education and outreach a priority and a critical step towards developing community and stakeholder supported policy recommendations.

On June 16, 2009, Hailey and the County's committees, with help from the *Northwest Energy Efficiency Alliance*, co-sponsored "**Green Building -The Real Story: A Presentation and Forum for the Wood River Building and Design Industry.**" The event's turnout was more than anticipated, with over 80 attendees at the presentation and approximately 35 attendees at the stakeholder's forum. The goal of the forum

was to generate and share ideas, discover areas of consensus, identify priorities, and evaluate various courses of action.

The event began with a one hour presentation by two experts in above-code energy programs; Eric Makela and Michelle Britt of the Britt/Makela Group, Inc. The presentation was geared specifically to local builders, architects, building officials, and real-estate professionals.

The presentation covered the following topics and can be found online at <http://www.haileycityhall.org/SustainabilityCommittee/Hailey%20and%20Blaine%20County%20Going%20Beyond%20Code.pdf>:

- The effects and importance of the current building stock and ways to address upgrading these older more inefficient structures.
- Home size and the increased impacts of larger homes.
- Potential for green job creation associated with green building
- Marketability and higher resale benefits associated with green building
- Current financial incentives
- Benefits of green building: energy, carbon, water, return of investment, etc.
- Price instability and unknowns regarding the cost of power.
- Green building program examples: including, but not limited to IECC (International Energy Conservation Code) 2009, & 2012 as compared to the current IECC 2006, HERS (Home Energy Rating Systems), and other adopted municipal above-code energy programs.

Following the presentation the Stakeholder Forum commenced.

FORUM METHODOLOGY

The Delphi Policy Method and Nominal Group Participation Technique were used to evaluate and seek consensus on various green building policy options. The hallmarks of the Delphi Policy Method are to bring together stakeholders with opposing views and to systematically attempt to facilitate consensus as well as to identify divergence of opinion, while the Nominal Group Technique is effective in generating new ideas and allowing every member of the group to express their ideas and minimize the influence of other participants.

Groups of 7-9 building and design industry professionals evaluated one of four policy issues. The one hour and thirty minute long session consisted of four parts; assessing reliability of a proposed problem statement, desirability of a policy goal, feasibility of a proposed policy, and a prioritization of policies resulting from the discussion.

Utilizing the Nominal Technique, individuals from each group were asked to rate various statements provided on a questionnaire using a Likert Scale response in addition to a narrative providing reasoning for each individual's respective response (i.e. Likert Scale response). A round-robin session then commenced and individuals shared their responses with the larger group. Staff from the City of Ketchum, Hailey, and Blaine County gathered questionnaires, grouped similar responses, and documented additional responses and comments during the round robin discussion sessions.

The final activity resulted in a prioritization of one or more policy options. Each individual was given one vote for the most feasible policy. The separate groups then reconvened as one, to discuss each policy issue, which included a brief report on each groups' respective policy issue and their results.

RESULTS

Policy Issue #1 Mandatory vs. Voluntary

Table 1. Questions and Responses: Evaluation of Public Support Regarding Mandatory and Incentive Based Program

Reliability	Problem Statement	Results
	<i>"Mandatory standards are the best way tot produce a higher standard of building."</i>	Very Reliable = 1 Reliable = 6 Unreliable = 2
Desirability	Policy Goal	Results
	<i>"All new construction shall be 30% more energy efficient than structures built under current code"</i>	Very Desirable = 3 Desirable = 5 Undesirable = 1 Very Undesirable = 0
Feasibility	Proposed Policy	Results
	<i>"A green building program should mandate increased energy efficiencies for larger homes while providing incentives for small homes or remodels meeting increased energy standards, such as density bonus, height bonus, or reduced building permit fees. How feasible is it this policy to be supported by the building and design industry?"</i>	Very Feasible = 0 Feasible = 9 Unfeasible = 0
Resulting Priority Policy	<i>"Mandate a HERS ratings on a square footage sliding scale"</i>	

Qualitative Summary: The design community expressed concern regarding the creative restraints a prescriptive approach might entail. Building professionals were more open to a mandatory approach, stating that "it" had been successfully implemented in other mountain towns and suggested mandatory was the only way to "get it done". Through discussion the design community indicated a mandatory approach may be more palatable and successful with the elements listed below:

1. Flexibility, so as to not limit design approaches.
2. Be implemented incrementally with a greater focus on energy use.
3. Higher standard for larger homes.

Various policies were brought forward; see appendix A. The policy with the largest support incorporates elements stakeholders' believe to be necessary for a politically feasible mandatory program; see Table 1.

STRATEGIES FOR COMMITTEE CONSIDERATION (based on the outcome of the group's discussion):

- Mandatory regulation at some level. Improvements will not occur at any significant level without mandatory standards.
- Implement standards incrementally; year by year, strategic area by strategic area, standard by standard, etc.
- Flexibility can be provided through energy performance standards such as HERS
- Flexibility can be provided through a point based systems, such as LEED or a locally created point system.

- Mandated performance levels are more easily administered and responsive to changes in state and federal codes and technological improvements if they are a certain percentage above current code.
- To increase the political feasibility of a mandated above-code building program should scale the level of mandate to be commensurate with the level of consumption.

**Policy Issue #2
New Construction and Current Building Stock**

Table 2. Questions and Responses: Evaluation of Public Support Regarding New and Old Building Stock

Reliability	Problem Statement	Results
	<i>Older and existing buildings are largely the most inefficient structures in a community and provide the greatest opportunity to improve energy efficiencies and reduce carbon emissions.</i>	Very Reliable = 5 Reliable = 4 Unreliable = 0
Desirability	Policy Goal	Results
	<i>Improve the energy and water efficiency of the existing and older building stock.</i>	Very Desirable = 6 Desirable = 3 Undesirable = 0 Very Undesirable = 0
Feasibility	Proposed Policy	Results
	<i>"A green building program should require above code standards for new square footage over 500 sq ft. and on remodels. How likely is this policy to be supported by the building and design industry?"</i>	Very Feasible = 1 Feasible = 8 Unfeasible = 0
Resulting Priority Policy	<i>"Lower taxes and/or permit fees for remodels or additions which have conducted an energy audit and increased energy efficiencies by certain percentage."</i>	

Qualitative Summary: Stakeholders agreed, older building stock is the largest strain on the community's energy resources and as such provides the largest opportunity for decreasing energy consumption. The largest stated barrier to improving old building stock is cost. In response to this concern the group found the following elements would provide avenues for consensus:

1. Incremental implementation.
2. Flexibility on how to increase energy or water efficiencies.
3. Return on investment must be clearly identified for any and all improvements.
4. Identify and target the least efficient elements of a structure through energy audits.

The most supported policy was an incentive based improvement system through the reduction of building fees or property taxes. Energy audits were considered an effective tool for targeting the greatest energy inefficiencies of a structure and an objective baseline for consumer comparisons.

STRATEGIES FOR COMMITTEE CONSIDERATION (based on the outcome of the group's discussion):

- Prioritize improving the energy efficiency of older building stock.
- Green building goals and benchmarks ought to distinguish between current and new building stock.

- Incentives should be scaled to the level of performance by providing bonuses proportional to the level of demonstrated increased efficiency.
- Mandated energy efficiency increases should be scaled to the level of performance of the structure.
- Mandating improvements based on energy audits or improvement to baseline at point-of-sale transactions may provide the most effective and politically feasible approach to improving energy efficiencies in the existing building stock.
- Building performance labeling system and easy to identify tabular data that builders and consumers can access, which provides a readily apparent basis of measurement and comparison for consumers.
- Provide guidance to builders and consumers with a hierarchical listing of cost effective system retrofits, energy conservation strategies(including re-commissioning), lighting fixtures and lighting control systems, HVAC&R system modifications (variable speed drives and programmable controls), building envelope improvements (sealing, insulation, and window films), and operations and maintenance education and planning.

Policy Issue #3 Third Party Certification vs. In House Verification

Table 3. Questions and Responses: Evaluation of Public Support Regarding 3rd Party Certification Verses Verification by the Building Department

Reliability	Data Statement	Results
	<i>“Third Party Certification (LEED, ENERGY STAR, HERs) provide an effective and fair process to ensure green building or above code energy standards are met.”</i>	Very Reliable = 2 Reliable = 5 Unreliable = 0
Desirability	Desirability Statement	Results
	<i>“A HERs rating of 70 (equivalent to 30% above current energy code) certifies the energy efficiency of the building, through a performance test, with less cost compared to other third party certification program.”</i>	Very Desirable = 1 Desirable = 5 Undesirable = 1 Very Undesirable = 0
Feasibility	Policy Example	Results
	<i>“If building inspection fees were reduced due to 3rd Party energy inspection and verification would a no-net increase in current fees be enough for the building and design industry to likely support 3rd party verification?”</i>	Very Feasible = 2 Feasible = 5 Unfeasible = 0
Resulting Priority Policy	If 3 rd Party Certification is required, the developer/owner should have to pay for the certification.	

Qualitative Summary: Through discussion the group stated support for 3rd party certification with incorporation of the following elements:

1. Must be affordable or cost recovery must be achieved within a reasonable amount of time.
2. Need to ensure 3rd party certifiers are verified and remain impartial.
3. Need to ensure that 3rd party certifiers are knowledgeable, accurate, and consistent (quality assurance).
4. Provide workshops and education to stakeholders to reduce the obscurity of 3rd party program(s), especially HERs.

Various ideas were brought forward; see appendix C. Originally, the group was asked what other ways the City or County might reduce the overall costs for 3rd party certification. There were little to no new ideas and through discussion it was determined that the real issue was who should pay for the certification cost. The policy (i.e. who should pay for certification/verification costs) with the greatest support was determined after discussions on all options. This policy was primarily supported due to the presumption that the building's resale value and reduced ongoing operation and energy costs would provide the greatest benefit to the developer/owner. Verifying and controlling for impartiality in 3rd party certifiers is a concern and needs more research. Those that have participated in or have a solid understanding of 3rd party certification, felt like these types of programs are actually easy to understand and comply with, but they can be daunting to those that are unfamiliar with them.

HERs and Energy Star are both 3rd party certification programs, which offer a means for verifying and certifying structures better current code. These programs are often more accurate than current building inspections done by the Building Department because they involve performance testing rather than checking for prescriptive requirements. Performance testing involves a whole building approach and ensures not only that proper insulation and other energy components have been installed, but ensures the quality of installment and construction of energy components create a tight building envelope. The performance test results in an energy efficiency score or rating. This information is valuable to homebuyers.

STRATEGIES FOR COMMITTEE CONSIDERATION (based on the outcome of the group's discussion):

- Pursue HERs (most cost effective and greatest flexibility) for all residential buildings.
- Commercial buildings should not be ignored; possibly implement separate requirements that are either prescriptive or points based for commercial buildings.
- If verification is done in-house, training and certification of staff will be needed.
- Provide an in-lieu fees option (these fees can go towards assisting lower income individuals or reduced fees for those that go beyond the required energy performance level).
- HERs is the least familiar 3rd party program – more education, specific to HERs, is needed for the public and stakeholders.
- If 3rd party certification is pursued reimbursement or a reduction in building permit fees should be considered for the portion of the fee which typically would go towards energy inspections to help off-set 3rd party certification fees. (The Building Department would no longer be inspecting the energy section of the building code with 3rd party certification.)

Policy Issue #4 Building Size

Table 4. Questions and Responses: Evaluation of Public Support Regarding Building Size

Reliability	Problem Statement	Results
	<i>"A structure's size is a basic consideration for evaluation of energy, water, and natural resources consumption of a building."</i>	Very Reliable = 3 Reliable = 4 Unreliable = 1
Desirability	Policy Goal	Results
	<i>"Reduce energy, water, and material resource consumption of larger homes."</i>	Very Desirable = 8 Desirable = 0 Undesirable = 0 Very Undesirable = 0
Feasibility	Proposed Policy	Results
	<i>"A greater energy efficiency performance or higher standard should be required of larger homes."</i>	Very Feasible = 2 Feasible = 6 Unfeasible = 0
Resulting Priority Policy	Address home size through policy, but employ incentives to achieve greater or more stringent requirements for larger homes.	

Qualitative Summary: Through discussion the group stated support for a building policy which addressed building size by incorporating the following elements:

1. Don't over-penalize larger homes compared to smaller homes.
2. Provide incentives, if feasible.
3. All structures should be required to comply with minimum standards, not just larger homes.
4. Provide measures which control for energy usage in all home sizes; don't penalize a larger home if it doesn't use more energy than a smaller home.
5. Homes with spas, heated garages, snowmelt systems, and other outside energy usage, should be required to off-set this energy usage in some way.
6. Provide education and outreach, regarding the environmental impacts of home size, to stakeholders.

Various ideas were brought forward; see appendix D.

STRATEGIES FOR COMMITTEE CONSIDERATION (based on the outcome of the group's discussion):

- Energy usage should be measured by a performance standard.
- A baseline for residential energy use should be established. All homes should be required to meet the baseline, regardless of size. This may mean that a larger home would have to be built more energy efficient, in order to achieve the same energy usage as a smaller home.
- Additional points or prescriptive measures, such as installment of renewable energy systems should be required for those homes that exceed baseline energy usage.
- Commercial buildings should not be penalized for larger size because commercial building size is often based on use, not excess.
- Recycling infrastructure needs to be improved to accommodate waste management of larger homes, which generate more waste during construction and demolition.

- Provide an in-lieu fees option (these fees can go towards assisting lower income individuals or reducing fees for those that go beyond the required energy performance level).
- Implement an Energy Mitigation Program that targets energy intense design elements i.e. heated drives, pools, and open fireplaces.

Appendix A Mandatory vs. Voluntary

Other Policy Ideas
Set energy efficiency standards higher. Requiring this is the most practicable and provides a definable return on investment.
Jackson Hole/Teton County 2009 comp plan and 2006 IECC amendments
Energy Star or HERS
Energy consumption through a HERS rating system should be used to show home's efficiency - score of 70 or better
Utilize Heat Recover Ventilation systems to encourage better indoor air quality without energy losses.
Increased energy efficiency
Off-set larger buildings' consumption of resource with longer term energy efficiency and resource savings.
Reduced permit fees, Energy Star, HERS
Reduced energy consumption: charge for snowmelt per square footage, offset with solar, or permitting fees would commensurate with usage of energy (EMP)
Energy Consumption
Energy star or HERS - incentive based
Charge for snow melt per square foot and there should be incentives for solar or thermal
Permitting process should commensurate with usage

Appendix B New Construction and Current Building Stock

Other Policy Ideas
Generally, builders operate on cost plus, therefore their cut is bigger. Helps to eliminate competition.
Sales tool between builders, advertising.
By addressing the current building stock, other income sources (waste recycling) are generated.
Reduction in permit fees
Require-Should we incentivize?
Look at energy efficiency upgrades and decide which ones are easiest for existing buildings to achieve.
Incentives may be in operational cost savings and health benefits, and resale value; but these are long term benefits. To encourage, incentives such as slower permit fees, should be offered.
Above code requirements must be substantial by measured improvements.
Provide incentive through permit rebate of property taxes.
Education marketing analysis
Home inspections and blower door testing with fines
Determine what square footage for a remodel or addition should require upgrades or compliance with an above-code standard.
Trade out opportunities such as Santa Fe's toilet program

Appendix C Third Party Certification vs. In House Verification

Other Policy Ideas
Raise taxes to cover 3 rd party certification costs
Self certification (pursues requirements of certification, but doesn't require actual certification due to additional costs).
3 rd party verification should occur in-house (train staff)
Pursue a modified program with a mixture of performance and prescriptive requirements.
Sliding scale fee structure, to commensurate with the size of the structure
Allow for in-lieu fees
Education and outreach to explain programs to the public, to reduce complications.
Credits or refunds for exceeding requirements
HERs rating of 70 is desirable
Establish a set reimbursement range to permit cost with 3 rd party raters.
Energy star or HERS - incentive based
Mandatory above code building practices

Appendix D Building Size

Other Policy Ideas
Points based system
Workshops provided by local governments to inform citizens and kick start private sector.
No mandatory programs
Incentives should include increase or decrease in fees, permitting, density, or zoning.
Pass a bond to provide grants and incentives
Create recycling opportunities for construction waste.
Require alternative fuels for snowmelt systems
Divert waste from landfill and use as biomass fuel.
Large buildings should have a mandatory higher standard.
Cap on water
Require higher performance envelopes for larger homes.