

Town of Hinesburg

PLANNING COMMISSION MEETING

Wednesday October 12, 2011

Approved November 30, 2011

Members Present: Jean Isham, Joe Iadanza, Carrie Fenn, Tom Ayer, Bob Linck, Ray Mainer, Kyle Bostwick

Members Absent: Tim Clancy, Johanna White

Also Present: Alex Weinhausen (Planning/Zoning Director), Todd Goodwin, Chris Gordon (Efficiency VT), Collin Frisbie, Bill Marks, Bart Frisbie, Ethan Thibault, Chuck Reiss, Elly Coates, Gill Coates, Matt Sayre, Richard Faesy, Peter Erb

Energy Star Requirement for New Homes

Alex W said we're here to discuss whether or not to modify a zoning requirement that new homes be built to the Energy Star standard for energy efficiency.

In May 2009, the Town of Hinesburg added several energy and green building standards to the Zoning Regulations (section 5.23). One of these standards was a requirement that new residential dwellings (except mobile homes) be constructed to be Energy Star qualified by the Vermont Energy Star Homes program. Energy Star is a long-standing national program created by the US Environmental Protection Agency and the US Department of Energy, which is managed here in Vermont by Efficiency Vermont. It encourages the construction of homes that are 15-20% more energy efficient than what is currently required of all new homes through the Vermont Residential Building Energy Standards (RBES). Typically Energy Star for new homes is a voluntary program. Here in Hinesburg, the intent of making it a requirement was to push home energy efficiency beyond the minimum State requirements to help ensure that new development is sited and built such that energy and overall resource use is minimized over the long term. Benefits of investing in greater energy efficiency were thought to accrue to the builder (Energy Star homes are more marketable/desirable), the homeowner (energy savings that accrue over time and other benefits), and the community (greater environmental sustainability, less pollution, less reliance on foreign fuels, etc.). **Alex W** said the idea here in Hinesburg was to encourage greater energy efficiency through an established program with 3rd party verification, which would be cost effective for builders and homeowners in both the short term via tax credits for Energy Star homes, and in the long term due to lower life-cycle energy costs (heating, cooling, lighting, etc.).

Alex W said some homeowners have had issues meeting the Energy Start standard, but that, we may have a much larger issue to deal with beginning on January 1, 2012. The Energy Star program is rolling out new, higher standards (version 3.0) on that date, and Hinesburg's Zoning Administrator (Peter Erb) has serious concerns that these new standards will be too difficult (and costly) for home builders to achieve – especially small-scale builders or people building their own homes. **Alex W** said the Planning Commission should discuss whether having Energy Star as a requirement is still practical? Are there

other options (like Efficiency Vermont's "Energy Code Plus") to keep Hinesburg's new residential development above minimum statewide efficiency requirements?

Jean I recognized Chris Gordon from Efficiency Vermont, and asked him for some background on the statewide minimum efficiency code (RBES) and the Energy Star program.

Chris G explained the difference between the required statewide code (RBES) and the Energy Star program that is a nationwide program administered in VT by Efficiency Vermont. He explained that the RBES code was put into place by state law in 1997, and has been updated occasionally over the years. In fact, a significant RBES update just went into effect on October 1, 2011. This updated statewide energy efficiency code elevated the minimum standards substantially, and this is one reason that the nationwide Energy Star program is being upgraded from version 2.0 to version 3.0 – i.e., in order to keep Energy Star homes 15-20% more efficient than the base code. **Chris G** explained that Efficiency Vermont has also rolled out a "middle ground" program called Energy Code Plus. Energy Code Plus has higher efficiency standards than the statewide RBES code, but not quite as high as the new Energy Star version 3.0 that goes into effect on January 1, 2012. He said that Efficiency Vermont provides free information, consultation, and inspections to homeowners seeking to obtain either Energy Code Plus or Energy Star.

Chris G explained some of the upgrades in the statewide RBES code that took effect on October 1:

Wall insulation R-20 instead of R-19

Ceiling insulation R-49 instead of R-38

Lighting – 50% must now be from energy efficient bulbs – previously not addressed

Air exchange 5 cycles per hour – previously not addressed

Duct sealing requirement upgraded

Foundation slab edge insulation R-15 instead of R-10

Foundation wall insulation R-20 (or R-15 in some cases) instead of R-10

Chris G explained a few of the differences between the RBES code and Energy Star version 3.0:

RBES (statewide minimum code)

Energy Star (v.3)

50% efficient lighting

80% efficient lighting

5 cycles of air exchange per hour (less tight home)

3 cycles of air exchange per hour (tighter home)

Quality of insulation installation not assessed

Quality of insulation installation must be grade 1 (top grade)

Thermal bridging not addressed

Thermal bridging must be addressed

Chris G said that Efficiency VT estimates the extra cost to make a home Energy Star versus the RBES minimum code is between \$3,000-\$4,000 for an average home, but that there is a fair amount of variability depending on the type of home, expertise of the builder, etc. They estimate that such an Energy Star home will be 15-17% more energy efficient than the same home built to the RBES minimum code. **Chris G** said that calculating actual energy costs is highly dependent on the home, its heating system, etc. However, he said that their models show that an average 2,000 square foot home would

have the following annual energy costs (heat and electricity) based on the three different efficiency standards: RBES (statewide minimum), \$5,300; Energy Code Plus, \$4,800; Energy Star, \$4,100. **Tom A** asked what the current Energy Star version 2.0 is most similar to compared to those Chris discussed. **Chris G** said it is probably most similar to the newly updated RBES code. **Tom A** asked if any other municipalities require Energy Star for new homes. **Chris G** said no, only Hinesburg presently.

Matt Sayre said he is currently having a home built on his Gilman Road property by Chuck Reiss. He said he is in favor of energy efficiency standards, but that he has run up against some difficulties with technical provisions of the Energy Star version 2.0 standard. He gave some specific examples that appeared to have some discretion in the version 2.0 standard, but will be mandatory in the version 3.0 standard. For example, the fresh air intake for the home will have to be 4' above grade instead of 2' above grade, and kitchen hood vents will not be allowed to vent into wall space (i.e., must vent to the outside).

Chuck Reiss said that he also thinks that certain provisions of the new Energy Star standard (v. 3) are going a little too far. He mentioned concerns about soil compaction and water management requirements. With that said, he described one part of version 3 that is an excellent improvement. He said it will require a lower score on the HERS index (Home Energy Rating System – a measure of overall energy usage) as the overall size of a home gets larger. That way, larger homes that typically use more heat and electricity, will have to be built even more efficiently. **Chuck R** said that he still supports the Town's original intent to require an energy efficiency standard above the statewide minimum. He thinks the Planning Commission should revise the regulations to require the Energy Code Plus standard – the middle ground between RBES and Energy Star (v.3).

Kyle B asked if higher standards will impact builders' ability to keep building homes in Hinesburg. **Collin Frisbie** explained that he is a local/regional builder from Sterling Construction, and that consumers look at the bottom line of cost. He feels that higher standards will increase the cost to builders, which will be passed on to consumers. **Chris G** noted that consumers will see very real savings in energy cost over the course of a typical 30-year mortgage. He described several upfront cash incentives for more efficient homes, including: \$200 for using increased efficiency appliances in the Energy Code Plus program; up to \$1,500 for lower HERS scores in the Energy Star program; up to \$2,000 federal tax credit based on overall efficiency (EPACT).

Collin F said that Sterling Construction builds Energy Star homes in Hinesburg, but that the new Energy Star (v. 3) will definitely be a stretch, and he feels it ought to be incentivized in Hinesburg rather than required. He also suggested setting an energy efficiency goal without linking it to a specific program or type of rating. He recommended that Hinesburg modify the standard so as to either require Energy Code Plus or simply default to the new RBES statewide code, since this code is now so rigorous.

Ethan Thibault explained that he is having a home built in Hinesburg, and that he has had a number of issues and unexpected costs due to the Energy Star requirement. He explained that his family subdivided to create a new building lot for him a number of years ago (before the Energy Star requirement). When he began looking into building his home, he was unaware of the Energy Star requirement, and as a result made a down payment on a modular home with a New York company that is not an accredited Energy Star home

manufacturer. He only learned about the Energy Star requirement when he applied for a building permit, and as a result, he had to either forfeit his deposit or hire someone to inspect the New York facility to ensure his home complied with Energy Star. He chose to hire an inspector to the tune of approximately \$1,500 that he wasn't expecting. He said that if he had known about the Energy Star requirement, he certainly would have dealt with an in-state modular home company that was Energy Star rated. He also described issues that came up when his foundation contractor and Efficiency Vermont personnel disagreed about Energy Star code requirements. As a result, he has to have portions of his newly poured foundation re-excavated to apply more insulation – again at additional cost that was not in his budget. He said he has no problem with Efficiency Vermont, but that he has a problem with the Town of Hinesburg having a higher efficiency standard that is potentially putting him in violation of the regulations, and as a result could jeopardize his ability to get a certificate of occupancy to occupy his house once it is completed. He said under the Energy Star program, you can't utilize your older/existing appliances if they're not Energy Star rated. He feels this is wrong. He recommended that the Town make Energy Star an incentive rather than a requirement.

Peter Erb raised a number of issues about the Town's energy standards. He thinks it is unfortunate that the standards seem to eliminate the ability of residents to build their own homes over time. He also feels that the standards don't treat residential and commercial development equally – i.e., much more burden on residential. He thinks energy efficiency requirements should be even handed for all new development, and he thinks the allowance and bonuses given for LEED certified non-residential structures are ill-advised because he feels the LEED certification is a joke.

Carrie F asked about modular home compliance with the statewide minimum RBES code. It was noted that modular homes made in Vermont must meet the RBES code, but not necessarily modular homes built outside of Vermont.

Todd Goodwin said like Ethan, he too was surprised by the Town's new Energy Star requirement in 2009. He explained that he built a log home in 2010, and had a number of Energy Star compliance issues that resulted in him spending \$8,000-\$9,000 more than he had budgeted. In the end, his home tested well, and received the Energy Star rating, but he was unable to utilize the pellet stove he was originally interested in heating the home with.

Chuck R said RBES is state law, and that the Planning Commission's original intent to keep Hinesburg ahead of the efficiency curve should be applauded and continued. There was general discussion about the level of RBES compliance. Builders are supposed to file a certification in the Town land records that a new home meets the RBES code. Apparently, only 30% or so of new homes built since RBES went into effect have this certification on file. **Bill Marks** said that perhaps legislation is needed at the state level to make sure RBES is met. **Chuck R** said that about 30% of new home construction in Vermont is Energy Star, so if we decide to make Energy Star voluntary, that's probably the percentage Hinesburg would see for new homes. **Bart Frisbie** of Sterling Construction recommended changing to an incentive based system for Energy Star or Energy Code Plus. He recommended that the Town create a new fee to get a Certificate of Occupancy (required before a new building can be occupied, and currently no charge), and then a

provision that waives some or all of this fee for if the home is Energy Code Plus or Energy Star rated.

Matt S wondered if Hinesburg could make it so whatever the new standard is, its application or enforcement be flexible to allow homeowners to finish up final compliance after moving in.

Joe I said that the Town needs to do more education and outreach to better avoid the situations that Ethan and Todd described. **Alex W** talked about ways to do this, including putting information in annual property tax bills, and/or having the Planning & Zoning office send out information to new owners whenever property is transferred. **Jean I** and **Joe I** agreed that more information needs to get out, but the question is how, when, and who will be responsible.

Alex W indicated that there isn't enough time for a zoning revision to go through the normal adoption process by January 1, 2012, when version 3.0 of Energy Star begins. He recommended that the Planning Commission submit an interim zoning, emergency provision to the Selectboard. The Selectboard could then adopt a temporary revision to the energy standard for new homes before January 1; while the Planning Commission is working on a final solution. **Jean I** asked Alex to draft and circulate this language to the Commission. Commissioners weren't clear what standard to use during the interim zoning period – i.e., either RBES or Energy Code Plus.

Planning for October 26 Rural By Design Forum

The Commission briefly discussed the format for the October 26 community forum that will focus on the rural design standards discussed by the Commission over the summer. The forum will start at 7pm with desserts and beverages. Commissioners will bake desserts, Kyle will provide beverages (cider & water), and Alex will procure plates, napkins, cups, etc. Alex will give an overview presentation (possibly with assistance from PC members) at 7:30pm, and then the bulk of the forum will be comprised of small group discussions.

Planning for October 29 Scenic Scavenger Hunt

The Commission briefly discussed the plans for the October 29 scenic scavenger hunt. Both Jean and Joe I will not be able to make this special Saturday morning event. **Alex W** indicated that lunch would be provided – no need for PC members to bake. He asked PC members to bring a digital camera, and to feel free to bring family or a friend. The workshop will begin at 10am with a short overview and instructions at the Town Office. Then groups will be sent out to different sections of town to find and assess scenic views. Lunch will be served back at the Town Office at Noon.

Minutes from: September 14, 2011.

Carrie F moved to accept as amended, **Ray M** seconded. The motion PASSED 7-0.

Other Business & Announcements.

Alex W reviewed some of the work items that make up the proposed Planning and Zoning budget for FY2012-2013. He has prepared the P&Z budget, and it is currently being reviewed by the Town Administrator. The Selectboard will review it later this fall.

Alex W alerted the Commission that the Town of Shelburne is holding a public hearing on November 10 regarding some minor revisions to their Town Plan.

Jean I closed the meeting @ 10:20pm

Next scheduled meeting: October 26, 2011 (Community Forum)

Respectfully Submitted,

Alex Weinhagen
Director of Planning & Zoning