

THINGS TO KNOW 2009 Washington State Energy Code

Background: The State Building Code Council (SBCC) revises the state energy code every three years to increase energy efficiency in new and renovated residential and commercial buildings. As part of the 2009 cycle, the SBCC was guided, in part, by Gov. Gregoire's request to aim for a 30% improvement in energy efficiency compared to the 2006 code. The SBCC adopted the 2009 energy code last November; it is now proposed to become effective January 1, 2011.

State law requires that new energy code measures meet two key criteria. They must:

- Increase the energy efficiency of newly constructed buildings (i.e., no going backwards);
- Be technically feasible, commercially available, and cost-effective to building owners and/or tenants.

Benefits of the energy code to consumers:

- With the new code, commercial buildings (including multifamily) will be about 13% more energy efficient than required by today's code. Total energy bill savings to building owners and occupants will be \$3.6 million per year.¹
- For new homes, average energy savings will be 18 percent in western Washington and 26 percent in eastern Washington. A Spokane home with a heat pump will save \$490 a year on electricity bills at today's electricity rates. A gas heated home in Seattle will save about \$275 per year. The vast majority of homebuyers will be in a positive cash flow position by the end of the third year of ownership. The down payment will be fully recaptured by this time. Savings will increase as energy costs increase – while the cost of the mortgage will remain the same over time.²
- More energy efficient homes make home *ownership* more affordable because energy bills are lower – and homes are warmer in winter and cooler in summer.

Costs:

- The estimated costs for non-residential buildings average about \$.97/sq ft across all building types - less than 1% of total construction costs.
- The costs to homebuilders to comply with the energy code are less than 1% of construction costs. Costs range from \$.50 to \$2.04 per square foot, depending on building size and heating system type. For average size gas heated homes, representing 75% of all new homes in Washington, the cost will be \$1.00 per square foot west of the mountains and \$2.04 per sq foot for east of the mountains.

Regional benefits

- Energy efficiency has saved the region enough electricity since 1980 to power four Seattle-size cities. Put another way, energy savings have avoided building the equivalent of five costly and polluting coal plants. As a result, Northwest families and businesses save more than \$2 billion per year in energy costs and fully 20% of those energy savings are due to energy codes in Washington and Oregon.

Why codes:

- Codes level the playing field, i.e., all builders face the same costs at the same time.
- Once a new building is constructed, it's expensive and often impossible to achieve the energy efficiency that can be built in economically at the time of construction.

¹ Commercial Sector Savings Analysis; Adopted 2009 Washington State Energy Code, Ecotope, Inc

² 2009 Washington State Energy Code: Analysis of Code Changes Adopted by the SBCC, WA Dept of Commerce, Ecotope