

## **LEGISLATIVE CONCEPT -- Increase Energy Code Stringency to Help Achieve Carbon Neutral Energy Homes and Buildings by 2030**

**Key Concept.** Use a combination of energy codes, “reach codes” and voluntary programs to accelerate construction of increasingly energy efficient homes and buildings to help achieve the broader goal of carbon-neutral homes and buildings by the year 2030.

### **Problem Addressed**

The Oregon Building Codes Division currently has no energy efficiency targets nor the authority to require reductions in building and home energy consumption through more stringent energy codes. Without significantly more stringent energy codes and targets to create predictability, the State of Oregon is highly unlikely to meet its established carbon reduction goals or other nationally-recognized goals such as carbon neutral buildings by 2030.

### **Key Actions**

A. The Legislature directs the Oregon Building Codes Division to:

1. Adopt more stringent energy codes.
  - The commercial building code to be implemented in 2010 will reduce code-regulated building energy use by a minimum of 25% compared to the existing code.
  - The residential building code to be implemented in 2012 will reduce code-regulated home energy use by a minimum of 15% compared to the existing code.
2. Create aggressive “reach codes” that reduce energy consumption to levels as far as economically and technically feasible below the above mandatory codes. These reach codes are to be established at the same time as the mandatory codes and will automatically become the mandatory codes for the next code cycle. Reach codes remove the unpredictability of the current code adoption process by determining the stringency levels of future energy codes in advance. This allows the construction industry and trades several years to prepare for the next code; in the current system they have less than six months.
3. Establish a schedule of phased energy reduction steps for both mandatory and reach codes from 2013 through 2030 that reduce building and home energy use to help meet the carbon neutrality goal. The timing of the steps and associated stringency levels shall be reviewed during each code adoption cycle and revised as appropriate in consideration of economic, technological and other appropriate factors. BCD should explicitly consider code cycles longer than the typical three years when this would be beneficial.
4. Make recommendations for less stringent energy code provisions that would apply to renovations and system replacement in existing buildings. Such recommendations shall require strong but reasonable improvements in energy efficiency in buildings where the challenge of meeting the normal energy code might result in negative

energy effects such as delayed or deferred investment in building renovations or the premature tear down of existing structures.

B. The Legislature directs the Oregon Public Utilities Commission and other applicable regulatory or governing bodies to ensure that incentive, market transformation, and education and training energy efficiency programs that relate to areas covered by the Oregon energy code are designed to increase building professionals' ability to design and construct buildings that meet the reach code in effect at the time the programs are offered. This will ensure a smooth transition for builders when the reach code becomes mandatory.

**Would you characterize energy and GHG benefits of this proposal as a major, medium, or minor? What data are needed to quantify these benefits?**

Major. Benefits could be determined by periodic evaluations measuring energy code compliance rates.

**Who is affected by this proposal?**

All design and construction and trade professionals. Also, owners and tenants of commercial buildings and buyers of new homes and buildings.

**Who will support it?**

Architects, environmental/energy efficiency advocates, ASHRAE, some commercial developers. Maybe utilities.

**Who's likely to oppose it?**

Oregon Home Builders Association, some commercial developers and owners. Potentially low-income advocates.

**Will there be a fiscal impact? Order of magnitude estimate?**

No.