SENATE BILL REPORT
SB 5485

As of February 11, 2011

Title: An act relating to maximizing the use of our state's natural resources.

Brief Description: Maximizing the use of our state's natural resources.

Sponsors: Senators Hargrove and Ranker.

Brief History:
Committee Activity: Environment, Water & Energy: 2/08/11.

SENATE COMMITTEE ON ENVIRONMENT, WATER & ENERGY

Staff: Jan Odano (786-7486)

Background: The State Building Code Council (SBBC) establishes the minimum building, mechanical, fire, plumbing, and energy code requirements necessary to promote the health, safety, and welfare of the people of the state of Washington by reviewing, developing, and adopting the State Building Code (SBC). The SBC consists of the International Building Code, International Residential Code, International Mechanical Code, International Fire Code, and the Uniform Plumbing Code, all of which, except the plumbing code, are published by the International Code Council. The International Building Code has priority and applies when there is any inconsistency with or between provisions of the other codes referenced, which are listed in priority order for application.

The International Green Construction Code (IGCC), published by the International Code Council, is a comprehensive set of minimum requirements to reduce the potential negative impacts from buildings on the natural environment and building occupants. The requirements address conservation of natural resources, materials, and energy; use of renewable energy technologies; improved indoor air quality; and building operations, maintenance, and owner responsibility. The IGCC allows jurisdictions to choose project electives, which are intended to provide flexibility in both meeting the requirements and addressing the needs of the jurisdiction. The IGCC is designed to coordinate with the International Building Codes.

When a public agency determines that a major new facility should be built or renovated, a life-cycle analysis must be completed at the design phase of the project. A life-cycle analysis must conform to guidelines established by the Department of General Administration (GA).

This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.

A life-cycle cost is the initial cost and cost of operation of a major facility over its economic life. A life-cycle cost analysis includes, among other elements, an energy consumption analysis. An energy consumption analysis is an evaluation of all energy systems and components by demand and type of energy.

Embodied energy is a method for establishing the total energy required for products or service. The embodied energy for building materials includes the energy used for gathering the materials to manufacture into products; manufacturing, shipping, using, and disposing or recycling the manufactured products.

Summary of Bill: A life-cycle analysis required at the design phase of any major facility construction or renovation project must include the calculation of the amount of embodied energy used in all building materials. A public agency may accept the facility design if it is satisfied that the life-cycle cost analysis gave due consideration of low embodied energy building materials.

The GA must establish, in its guidelines for energy conservation in design of public facilities, a method for calculating the embodied energy used in building materials for construction of a major facility and identify simplified methods to ensure low embodied energy building materials are used in the building design.

The SBC includes the IGCC, published by the International Code Council, Inc., and is adopted by reference.

The SBCC, following the Energy Life-Cycle Cost Analysis guidelines established by GA and requirements for revising and adopting changes to the building code, must adopt changes as necessary to promote the greater use of wood and wood products.

Appropriation: None.

Fiscal Note: Available.

Committee/Commission/Task Force Created: No.

Effective Date: Ninety days after adjournment of session in which bill is passed.

Staff Summary of Public Testimony: PRO: We need to align the state building codes with our climate change policy and sustainability. Wood and wood products are very sustainable especially compared to other building materials and are part of the global solution. Wood sinks carbon, and trees replacing those cut for wood are carbon sinks. Gravel and steel do not sink carbon. The amount of energy used to make concrete and steel could require much more than the energy savings of a building built to LEED standards. We should address the inconsistent and inefficient processes that allow industries to take advantage of the current building code to sustain businesses that are not consistent with existing environmental policy. A lifecycle assessment of building materials needs to be part of the equation. The amount of energy it takes to produce wood products is far less than other materials. Using wood materials will reduce our carbon emissions and restart the mills across the state. Wood and forest products are a big part of the state's economy representing the second largest

manufacturing sector. Using more wood is good for the environment and good for the economy. Stimulating the economy will help to bring more revenue and jobs to the state. California has adopted its own green code, which is something to look at.

CON: This adopts a new code without review by the SBCC. The SBCC has promised to review green codes and green plumbing codes. The IGCC impacts every aspect of building including electrical, mechanical, plumbing codes and land use. The IGCC is not final and adoption now is premature. It is a false premise that wood is disadvantaged in the building code, many architects use it in their building designs. The idea of measuring embodied energy is worthy, but there is no common metric for embodied energy. The metric should be developed at the national level. Using the SBC to promote wood is inappropriate, the purpose of the SBC is to protect life and safety of the occupants of the building. Architects and builders should be the ones to determine the materials for a building based on safety and use of the building. Architects and building officials carry the liability for building codes. Wood products organizations or other groups should not determine building construction or materials. Embodied energy is about the life of the building. The best buildings are the ones that have the longest life. Lifecycle assessments are subjective.

OTHER: The SBCC is in the process of reviewing all green codes. The IGCC is very broad covering more than materials such as land use, grey-water, and plumbing code. Embodied energy is not an easy fit with a life-cycle assessment. Isolating fossil fuels will require a special effort to isolate in the life-cycle assessments.

Persons Testifying: PRO: Elaine Oneil, Consortium for Research on Renewable Industrial Materials; Dwight Yochim, Wood Products Council; Dave Nunes, Pope Resources; Debora Munguia, WA Forest Protection Assn.

CON: Tonia Neal, WA State Conference of Mason Construction; Pete Crow, International Assn. of Plumbing & Mechanical Office; Randy Scott, WA State Assn. of Plumbers and Pipefitters; Stan Bowman, Marc Jenessky, American Institute of Architects; Bruce Chatkin, WA Aggregates & Concrete.

OTHER: Tim Nogler, State Building Code Council; John Lynch, General Administration; Nancy Hirsch, NW Energy Coalition; Mo McBroom, WA Environmental Council.