



STATE OF WASHINGTON  
DEPARTMENT OF COMMUNITY,  
TRADE AND ECONOMIC DEVELOPMENT

# Climate Action Team

## Energy Efficiency and Green Building IWG

### Meeting #5

### August 14, 2008

WA Departments of Ecology and  
Community, Trade & Economic Development  
Center for Climate Strategies  
Ross & Associates

# Agenda

- Roll Call
- Review and approval of IWG Meeting #4 summary
- Prepare for quantification of 2009 Actions
- Review and discussion of revised 2009 Actions developed by small groups
- Public Comment
- Next Steps for IWG
- Agenda, Time and Date for Next Meeting

# 2009 Actions Under Consideration

## **EE/GB Action 1: Energy Efficiency Incentives:**

- Energy Efficiency Quality Investment Program (EEQUIP)
- CHP and Distributed Energy Development

## **EE/GB Action 2: Energy Efficiency in Existing, New and Renovated Public Buildings**

## **EE/GB Action 3: 2009 State Energy Code Improvements and Continuous Energy Efficiency Improvement Program for Buildings**

# Quantification of 2009 Actions and Recommendations

- To Quantify or Not To Quantify?
  - Are some of the elements of an Action likely candidates for quantitative analysis of costs and benefits, or is part or all of the Action largely in support of another action with quantifiable costs and benefits?
  - If an Action can be quantified, what are some of the key parameters/assumptions for the analysis likely to be?
  - What are reasonable goals and timing for quantifiable options?
  - Recommended data sources?

# EE/GB Action 1A: Energy Efficiency Quality Investment Program (EEQUIP)

- Targeted incentives that promote the construction, retrofitting, and long-term operation of buildings at substantially higher levels of energy efficiency, and to promote the adoption of combined heat and power (CHP) and other distributed energy systems
- Ideas include:
  - Public Utility Tax (PUT) incentives for non-residential buildings and commercial properties that demonstrate superior energy performance
  - Sales tax credits for new buildings that demonstrate superior energy performance
  - Use of verified third- party or independently standardized indices of performance, not necessarily specific individual standards
  - Inclusion of incentives for CHP and distributed energy systems\

# EE/GB Action 1A: Energy Efficiency Quality Investment Program (EEQUIP)

- Revised Elements:
  - Requirement of progressively more stringent Portfolio Manager scores for non-residential buildings to qualify for PUT credit
  - Establish performance standard for new residential and non-residential buildings to qualify for 10% credit on sales tax paid on construction materials
  - Legislation to allow government entities to provide funding for energy efficiency improvements, with repayment through property taxes
  - Addition of estimates of revenue requirements/impacts
- For quantification, consider setting targets for number/area of buildings participating, average upgrade per unit area, average cost per unit (need to consider overlap with other options)

# EE/GB Action 1A: Energy Efficiency Quality Investment Program (EEQUIP)

- Discussion Questions/Comments from Co-leads:
  - Process for estimating projected cost impacts?
  - There will be some non-trivial administrative costs for verifying eligibility for the incentives, probably higher in early years of the programs
  - Any legislative action taken would likely take effect on July 1, 2009
  - Are the elements in a priority order? If so, what is the rationale?
  - Would be good to include explicit language about accountability/evaluation of the effectiveness of the incentives. The Legislature will likely include a sunset provision in any incentive legislation

# EE/GB Action 1B: CHP and Distributed Energy Development

- Better use Washington's biomass and other resources in distributed energy systems, with a focus on combined heat and power systems (CHP) and district heating systems
- Ideas (as included in Action 4) included:
  - Tax incentives for CHP and district heat including: B&O tax credits, sales tax exemptions on machinery and equipment, and property tax exemptions
  - Adoption of output-based emissions regulations, and efficiency minimums for qualifying CHP systems
  - Requiring CTED (on behalf of public utilities) and UTC (on behalf of investor owned utilities) to assess the regulatory barriers to CHP and recommend enabling changes
  - Address the definitions of alternative energy/bioenergy with consideration given to including the recycling of spent liquor from wood pulping processes

# EE/GB Action 1B: CHP and Distributed Energy Development

- [Presentation and discussion of current thinking by group considering this Action as to in incorporation of CHP/DE elements]
- Quantification of Action (as element of EE/GB-1)
  - Targets for CHP capacity development?
  - Targets for other DE development, community energy system development?
  - Assumptions regarding displaced fuels, average efficiencies?

## EE/GB Action 2: Energy Efficiency in Existing, New and Renovated Public Buildings

- Substantially upgrade the energy efficiency and sustainability of publicly-constructed and -operated buildings
- Ideas include:
  - Require a process of benchmarking, auditing, and implementation of energy-efficiency measures in existing publicly-constructed and –operated buildings
  - Require that new and substantially renovated publicly-constructed and –operated buildings meet strict energy performance standards
  - Implement additional improved operations and management practices
  - Adopt a voluntary standard and product verification program at the Dept. of Ecology

## EE/GB Action 2: Energy Efficiency in Existing, New and Renovated Public Buildings

- Recent revisions emphasize
  - Partnering with USEPA ENERGY STAR
  - Public posting of energy efficiency results
  - Organization of Legislative Detail
    - Existing buildings (state agencies/schools/colleges/universities, and Cities, Counties, and other Public Taxing Authorities) with metric-related requirements phased-in over time
    - A similar division for new buildings, with different metrics applicable
    - A section on Building material standards and certification programs
- Quantification of this Action
  - Will need help translating goals into floor area covered, fractional improvement per building

## EE/GB Action 2: Energy Efficiency in Existing, New and Renovated Public Buildings

- Discussion Questions/Comments from Co-leads:
  - Legislation would likely be effective on 7/1/09
  - Some brief indication of why the specific square footage and dates were chosen will be helpful
    - Produce a table laying out the square footage by category to show implications of either going lower or higher for number of buildings and percentage of total floor space included
  - Administrative costs may be non-trivial, especially in early years.
  - Level of detail is impressive
  - Not sure we want to have the actual legislation done prior to the Sept. CAT meeting; it is important to discuss these concepts at the meeting, but we may not want to get fully vested in specific language

## EE/GB Action 3: 2009 State Energy Code Improvements and Continuous Energy Efficiency Improvement Program for Buildings

- Path or detailed plan to significantly upgrade the state's energy code (residential and commercial) in 2009 to the highest levels among state codes (e.g. 30% above current levels), and develop a proposal that will drive Washington toward the construction of low-carbon, zero net energy buildings by 2030
- Ideas include:
  - Revise the Washington State Energy Code (WSEC) to achieve a 30 percent reduction in new building energy use of compared to current WSEC
  - Through legislative action, establish a Continuous Energy Efficiency Improvement Program for Buildings

## EE/GB Action 3: 2009 State Energy Code Improvements and Continuous Energy Efficiency Improvement Program for Buildings

- Recent revisions emphasize
  - New EUI baselines for “beyond code” energy savings targets
  - Additional specificity on agencies/organizations involved in implementing this Action
- Quantification of this Action
  - What fraction of new (and existing) buildings will meet “beyond code” (part 2) targets?

## EE/GB Action 3: 2009 State Energy Code Improvements and Continuous Energy Efficiency Improvement Program for Buildings

- Discussion Questions/Comments from Co-leads:
  - Since likelihood of support for code upgrade is strong, it may help to provide some specifics of implementation, e.g. a flexible menu of modifications to reach code
  - Need to make sure we have good information on cost effectiveness of energy codes (in response to CAT)
  - Note administrative costs borne by state agencies and local governments. Estimate costs for building departments/training/ information to extent possible?
  - Emphasize that improvements to the code will provide a high baseline from which we calculate beyond-code incentives for new buildings

# Public Comment

- Input to IWG process from members of the public present in person or on the phone

# Next Steps

- Working with co-leads and facilitators, small groups continue to refine actions as needed based on full IWG input
- Working with small groups, co-leads, and others as identified by IWG members to identify relevant data sources, facilitators will begin quantification of 2009 actions in preparation for the September 3 EE/GB IWG meeting

# Next IWG Meetings

- Agenda:
  - Review initial quantification of 2009 Actions
  - Prepare materials for September 18-19 CAT meeting
- Date/time for Meeting #6:
  - September 3, 1:00 – 3:00 PM

