

## **Overview of Beyond Waste Implementation Work Group Recommendations Related to 2007 Climate Advisory Team and Technical Work Group Recommendations**

The purpose of this document is to review the status of and provide additional recommendations for actions found in AW-3; explain how BW-IWG recommendations relate to and assist in implementing additional strategies, and establish the context within the work of the 2007 Climate Advisory Team and its recommendations.

On February 1, 2008, the 2007 Climate Advisory Team provided its recommendations to the Governor in its report titled *Leading the Way: A Comprehensive Approach to Reducing Greenhouse Gases in Washington State*.

[http://www.ecy.wa.gov/climatechange/CATdocs/020708\\_InterimCATreport\\_final.pdf](http://www.ecy.wa.gov/climatechange/CATdocs/020708_InterimCATreport_final.pdf)

The CAT's recommendations were presented through twelve "powerful directional recommendations." The directional recommendation that includes the work undertaken by the Beyond Waste Implementation is *Recommendation 11: Reduce waste and Washington's emissions of GHGs through improved product choices and resource stewardship*.

The 2008 Beyond Waste Implementation Work Group scope of work specifically addressed certain implementation elements outlined in the adopted strategy identified as *AW-3: Significant Expansion of Source Reduction, Reuse, Recycling, and Composting*. However, the proposals resulting from the BW IWG's work also relate to and help implement other strategies included in Recommendation 11. These include RCI-8 and RCI- 10. In addition, some of our recommendations could assist in addressing a strategy developed by the RCI TWG identified as *RCI – 11: Policies and/or Programs Specifically Targeting Non-energy GHG Emissions*.

AW-3 identified ten actions to achieve the overall strategy. The BW IWG did not include in its scope of work or did not have time to address in detail all ten actions. All ten actions are included in this document with a status comment and brief next step recommendations where appropriate. Those actions that have been worked on more extensively with detailed recommendations are included in the xxxxx report (section, primary report, whatever we call it)

Below is the text related to Recommendation 11 in the CAT's February 1, 2008 report. The full report can be viewed at

[http://www.ecy.wa.gov/climatechange/CATdocs/020708\\_InterimCATreport\\_final.pdf](http://www.ecy.wa.gov/climatechange/CATdocs/020708_InterimCATreport_final.pdf)

**Recommendation 11: Reduce waste and Washington's emissions of GHGs through improved product choices and resource stewardship**

Greatly expanding source reduction, reuse, recycling and composting will result in a low cost/ton for GHG reductions and many co-benefits. The CAT strongly supports **Significant Expansion of Source Reduction, Reuse, Recycling, and Composting (AW-3)** because most communities and many businesses in Washington now have strong recycling programs that can be enhanced, there is a low cost/ton for the resulting GHG reductions and the many co-benefits, and this also represents significant opportunity to engage the public in combating global warming at the household and local business levels.<sup>1</sup> This strategy sets targets to reduce the total amount of household and business waste by 15%, recycle at least 50% of the waste remaining, and compost over 90% of compostable organics through expanded source reduction, reuse, recycling, and composting of household, business, industrial, agricultural, and construction-related waste streams. In addition to traditional recycling programs, this strategy encourages ‘cradle-to-cradle’ design and manufacturing, and proposes to take advantage of market and business-based activities.<sup>2</sup>

**The ‘most promising’ strategies under this recommendation are:**

- Significant Expansion of Source Reduction, Reuse, Recycling and Composting (AW-3)
- In-State Production of Biofuels and Biofuels Feedstocks (AW-2)
- Consumer Education Programs, Including Labeling of Embodied Life-cycle Energy and Carbon Content of Products and Buildings (RCI-8)
- More Stringent Appliance/Equipment/Lighting Efficiency Standards, and Appliance and Lighting Product Recycling and Design (RCI-10)
- Expanded Use of Wood Products for Building Materials (F-5)

In order to provide consumers with a better understanding of the impacts of their choices and empower them to make better choices, enhanced public education and outreach to support the long-term success of Washington’s mitigation actions should be provided through **Consumer Education Programs, Including Labeling of Embodied Life-Cycle Energy and Carbon Content of Products and Buildings (RCI-8)**. Education and certification programs for professionals involved in delivering services in support of RCI and other policy strategies considered by the CAT should also be developed and implemented. ‘Carbon labeling’ of products and buildings should be considered and evaluated for potential effectiveness and how this might be done in a consistent and verifiable manner, possibly on a regional or federal level.

Another way to support improved product choices is **More Stringent Appliance/Equipment/Lighting Efficiency Standards, and Appliance and**

<sup>1</sup> This strategy incorporates and builds upon the State’s recently developed Beyond Waste Plan.

<sup>2</sup> A partial list of the approaches in this strategy includes: source reduction (waste prevention) initiatives; expanding existing and encouraging more reuse, recycling, composting, and processing in businesses; establishing product stewardship programs; using environmentally preferable procurement practices; facilitating safe byproduct “synergy” strategies; achieving a reduction of toxics in packaging and products to make them safer to manufacture, use and recycle while increasing their value and use in the market place; increasing closed-loop recycling and the percentage of recycled-content in products, and expansion of disposal bans. Additional detail on this and all strategies is available in Appendices F–J.

**Lighting Product Recycling and Design (RCI-10)**, which increases energy efficiency through strengthened standards for new lighting, equipment, appliances and consumer electronic products and encourages product recycling and reuse, thus avoiding the generation of solid waste and the production and emissions of toxic materials. Reduction of GHG emissions through improved product choices is also supported by the **Expanded Use of Wood Products for Building Materials (F-5)**, which promotes substitution of wood products in place of other energy intensive materials (e.g., steel and concrete) to store carbon and avoid production emissions. Increased utilization of waste is accomplished through **In-State Production of Biofuels and Biofuels Feedstocks (AW-2)**, which targets waste biomass for biofuels.

### **AW-3: Significant Expansion of Source Reduction, Reuse, Recycling, and Composting**

AW-3 identified ten actions to achieve the overall strategy of significant expansion of source reduction, reuse, recycling, and composting. This ten actions are repeated below with a status update and suggested next steps, where appropriate. The complete text of AW-3 can be found on pages 31-52 at

[http://www.ecy.wa.gov/climatechange/interimreport/122107\\_TWG\\_agr.pdf](http://www.ecy.wa.gov/climatechange/interimreport/122107_TWG_agr.pdf)

#### *1. Local waste audits*

- *development of statewide system model*
- *development of statewide funding*
- *implement audit*
- *use results to influence local GHG reduction programs*

Status: Department of Ecology convened an advisory group to assist in developing a methodology for regional waste audits that would be relevant to and utilized by local jurisdictions. An RFP is ready to be released when the freeze on professional services contracts is lifted. The plan is to have x audits conducted throughout the state during 20xx. Local audits are currently underway in King, Pierce and Snohomish Counties.

#### *2. Evaluate use of a model and index to measure and monitor GHG reductions*

- *the EPA's WARM model was used for policy development*
- *WARM model has some gaps, notably in failing to calculate source reduction potential for yard waste and food waste and it doesn't consider all the materials that are being recycled.*
- *Investigate applicability or tweaks necessary to account for the actual types and location of disposal facilities in Washington State.<sup>3</sup>*
- *Implement and evaluate use of the Washington State Consumer Environmental Index (CEI). CEI tracks changes over time in the environmental emissions and their impacts caused by the production, use and disposal of items purchased each year by Washington's consumers.*

Status: EPA continues to expand the materials covered in the WARM model and refine calculations. It also continues to work with experts regarding issues around modeling organics. The limitations of WARM continue to limit the ability to model ghg reductions resulting from many product stewardship and recycling activities, but it is the best available to our knowledge. It is unlikely the State could afford to create a superior model.

The Washington State Consumer Environmental Index has been created and ....

3. *Build on existing source reduction and recycling programs, targeting commodities with the largest GHG reduction potential.*

Status and Recommendation: This area has been addressed by the Beyond Waste IWG.

4. *Fully implement and update Washington's Beyond Waste Plan. The current 5-year milestones and action items include key initiatives to increase recycling of industrial waste and organic materials, expand green building, reduce toxics and increase the ability to recycle products, and more. The next update and related funding priorities should further incorporate GHG emissions analysis and GHG reduction actions.*

Status and Recommendation: The Beyond Waste update process is scheduled to begin in 2009 with the update completed in 2010. Ecology should incorporate all related work for the 2007 TWGs, 2008 IWGs, and CAT into that update process.

5. *Fully implement and expand Environmentally Preferable Procurement policies and programs by the State and local governments.*

Status: This area has been addressed by the Beyond Waste IWG. In addition, an internal staff team is ...

6. *Encourage manufacturers to provide – and consumers to use – end of life management and upstream design solutions that reduce the green house gas and other environmental impacts of product waste. Develop a framework policy for establishing product stewardship programs.*

Status and Recommendation: This area has been addressed by the Beyond Waste IWG.

7. *Encourage large retailers (e.g. Wal-Mart) to leverage buying power to encourage manufacturers to make the design solutions that reduce GHG and environmental impacts of product waste.*

Status and Recommendation: This area has been addressed by the Beyond Waste IWG.

8. *Establish a research and educational institute to address sustainable product design and manufacturing.*

Status and Recommendation: The Beyond Waste IWG identified this an very important next step but did not have the time to develop a specific proposal. Others outside the CAT process may develop similar proposals and the Beyond Waste IWG advises that such proposals be supported. Also, Beyond Waste IWG suggests that related proposals to establish research, educational and/or training institutes related to toxics reduction, clean energy, or environmental technologies should be expanded in scope to include sustainable product design and manufacturing.

9. *Ecology, CTED, Health and other appropriate agencies should coordinate reporting to the appropriate committees of the legislature, on an annual basis, progress made in reaching the goals and recommendations for legislation or other actions by the state.*

Status:

10. *Form an on-going technical work group of experts on reduction, reuse, recycling, composting, product stewardship and green business development to advise Ecology, CTED, Health and other appropriate agencies on actions needed to implement this action item and attain the policy goals. This could be accomplished by restructuring the Washington Solid Waste Advisory Committee (SWAC), creating a sub-committee of SWAC, or by creating an entirely new group. The technical work group's recommendations will be considered when reporting progress, next steps and recommendations to the legislature.*

Status and Recommendation: If the Beyond Waste Implementation Work Group is not continued through the CAT process past 2008, then the additional necessary work shopd be passed on to ensure on-going policy development and implementation. The State Solid Waste Advisory Committee is an established committee with diverse stakeholder membership. Membership should be reviewed and enhanced to ensure that stakeholder representation includes expertise in upstream waste prevention, business product stewardship, zero waste business practices, and climate implications. If the CAT does not continue the BW IWG under its umbrella, then SWAC should be asked to form a Beyond Waste or Climate Impacts subcommittee to absorb and continue the work of the Beyond Waste Implementation Work Group, including its membership. This would include completing work in 2009 and identifying and advocating significant next steps related to materials management and green house gas emission reductions, including legislation for 2010 and beyond.

### **RCI-8 Consumer Education Programs, Including Labeling of Embodied Life-Cycle Energy and Carbon Content of Products and Buildings**

RCI-8 contains a number of recommendations related to the work of the Beyond Waste IWG. For the complete text see pages 55-62 at

[http://www.ecy.wa.gov/climatechange/interimreport/122107\\_TWG\\_rci.pdf](http://www.ecy.wa.gov/climatechange/interimreport/122107_TWG_rci.pdf)

These elements include:

*Carbon labeling of products.* Please see extensive text at link above.

*Implementing requirements for retail education (on packaging or on a handout at the time of purchase), that will inform customers about the energy consumption of the products and materials (including building materials) they buy, and how to operate and use products in the most energy-efficient manner. These requirements should take advantage of and build upon existing Energy Star initiatives and certification programs, and be implemented with retail sales organizations where applicable.*

Relevance of Beyond Waste IWG proposals:

The Beyond Waste Implementation Work Group's recommendations address these elements in part. The Collaboration with Retailers proposal does not envision requirements on retailers, but instead a collaborative yet rigorous effort that could include carbon labeling and retail education as described in RCI-8. The Environmentally Preferable Purchasing proposal could be a means of providing incentive for retailers to participate in use of labels, certifications and retail education. Product categories covered under a future Product Stewardship Framework law, as proposed, could have carbon labeling or certification requirements applied, if through the described process carbon labeling or certification was determined to be warranted and beneficial.

### **RCI-10 More Stringent Appliance/Equipment/Lighting Efficiency Standards, and Appliance and Lighting Product Recycling and Design**

RCI-10 contains a number of recommendations related to the work of the Beyond Waste IWG. For the complete text see pages 55-62 at

[http://www.ecy.wa.gov/climatechange/interimreport/122107\\_TWG\\_rci.pdf](http://www.ecy.wa.gov/climatechange/interimreport/122107_TWG_rci.pdf)

These elements include:

*Require (through state legislation) manufacturers to have an effective system in place for collecting and recycling end-of-life bulbs that contain hazardous materials that is easy and convenient for the consumer. (footnote included this text: For example, transitioning from incandescent lighting to CFLs in the residential sector offers enormous energy savings potential, but the fact that there is no comprehensive and effective system in place for recycling or disposing of old CFLs to avoid mercury contamination creates a barrier to achieving the full potential of CFLs.)*

*Provide incentives for manufacturers to improve the energy efficiency of products, the efficiency with which products can be produced, and the degree to which products can be recycled.*

*Consideration of potential shifts in the use of toxic materials (such as mercury in fluorescent lamps) that could inhibit consumer demand for the efficient appliances and create costly disposal issues. For example, efficiency standards could be linked to manufacturer "takeback" requirements, toxic reduction standards, or incentives for development and use of non-toxic technologies.*

*Require (through state legislation) the preferential procurement of EnergyStar products if available (equipment, appliance, or technology) if state funds are involved (e.g., state purchasing contracts, state grants or loans, etc.)*

*Substantially increase the use of green electronic products and reduce solid waste by promoting EPEAT through a consortium of state, local government and business procurement entities, and require the use of EPEAT in state and local procurement.*

Relevance of Beyond Waste IWG proposals:

The Beyond Waste Implementation Work Group's recommendations address these issues in part. The proposed Product Stewardship Framework legislation would establish a means to achieve a number of elements and mechanisms above. Fluorescent lighting could be named as an initial product category in the legislation. Or fluorescent lighting recycling could be run as a separate bill, using text from the Framework legislation as that basis of the text. A sample of that approach is attached.

The Environmentally Preferable Purchasing proposal can be a means of addressing the other elements above.

### **RCI-11 Policies and/or Programs Specifically Targeting Non-energy GHG Emissions**

RCI-11 contains a number of recommendations related to the work of the Beyond Waste IWG. These elements pertain to the use of Ozone Depleting Substitutes (ODS) such as Hydrofluorocarbon (HFCs) and Perfluorocompounds (PFCs) that are potent greenhouse gases. A number of consumer products contain these gases, including novelty aerosols, aerosol Mobile Air Conditioning products sold to non-professionals, and aerosol keyboard cleaners.

Text throughout RCI-11 calls for consumer and retailer education, labeling, procurement policies, and restrictions. The text can be seen on pages 63-71 at [http://www.ecy.wa.gov/climatechange/interimreport/122107\\_TWG\\_rci.pdf](http://www.ecy.wa.gov/climatechange/interimreport/122107_TWG_rci.pdf)

Relevance of Beyond Waste IWG proposals:

Recommendations from the Beyond Waste IWG will assist in addressing some elements described in RCI-11. The proposed Product Stewardship Framework legislation would establish a means to achieve a number of approaches named in the text. For instance, consumer aerosol products with ODS could be named as an initial product category in the legislation. Or ODS containing consumer aerosol products could be run as a separate bill, using text from the Framework legislation as that basis of the text. (A sample of that approach is attached. - maybe)

The Environmentally Preferable Purchasing proposal and work with retailers can be a means of addressing the other elements discussed.