

Update on Energy and Performance Assessment Tool for ENERGY STAR Tier 2 Computer Specification

June 20, 2007 Washington, DC

Meeting Agenda



- 1:00 Welcome and Introductions
- 1:10 ENERGY STAR Plans for Utilizing an Energy and Performance Assessment Tool for Tier 2 Computer Specification

Katharine Kaplan, US EPA

1:20 ECMA/BAPCo Status Presentation

Kevin Fisher, Intel and John Peterson, BAPCo

- Goals for effort, ECMA role
- Overview, work completed to date and planned
- Process, including data considerations and stakeholder involvement
- Discussion of key questions
- Planned next steps and timeline
- 2:50 ENERGY STAR Initial Proposed Approaches for Products Not Covered in the Benchmark

Tom Bolioli, Terra Novum

- Game Consoles
- Workstations
- Other Products
- 3:15 Tier II Network-related Requirements

Bruce Nordman, LBNL

- Link rate modulation
- Full Network Presence in Sleep
- 3:30 ENERGY STAR Facilitated Discussion on Tier 2 Process

Katharine Kaplan, US EPA

4:00 Meeting Close

Energy and Performance Assessment Tool-Background



- EPA intends to base Tier 2 of the ENERGY STAR computer specification on an energy and performance assessment tool.
- EPA hopes to create an energy efficiency metric that will remain relevant regardless of changing technologies or application.
- Method allows EPA to move away from prescriptive specifications that set individual component levels and move towards specifications that recognize whole product energy efficiency.
- A specification based on performance and capability will also provide manufacturers with design flexibility, so that they may maximize energy efficiency in ways that best complement other priorities.
- EPA has implemented other ENERGY STAR specifications that simultaneously take into consideration both energy and performance including those developed for: imaging equipment, workstations, monitors, air cleaners, ventilating fans, and ceiling fans.

Goals for Tool



- Approximate the performance/capability of a computer. This could be coupled with energy use measurements for ENERGY STAR qualification;
- Directly reflect the annual energy use and savings of products as they are expected to be used;
- Provide a consistent and neutral platform for comparison across different product platforms (based both on OS and/or hardware differentiators), types and capabilities, even as products evolve and change in the marketplace;
- Be developed by or endorsed by a broad range of constituents, in a transparent and open nature;

Goals for Tool



- Be available for downloading so that interested parties can assess the efficiency of their systems compared to the ENERGY STAR criteria;
- Be intuitive and accessible to a broad audience;
- Function without disrupting the installed software load of a deployed computer; and
- Be fully ready for use by July 2008, in anticipation of the Tier 2 Computer Specification effective date of January 2009. A version close to the final one should be ready by January 2008 to allow time for system testing and determination of categorization and energy limits for the specification.

Collaboration on Tool



- EPA has been investigating the energy and performance assessment approach with a range of stakeholders including the ECMA working group TC38-TG2.
- The ECMA working group has been tasked with developing a cross platform method for determining the energy efficiency of desktops, notebooks and workstations, and is interested in the development of an energy efficiency metric that can be used for Tier 2 of the ENERGY STAR computer specification.
- The Agency believes that EPA and ECMA share many common goals for such an efficiency metric. With the goal of helping develop a product that the Agency can embrace in mind, EPA is actively participating in the TC38-TG2 working group.

Thank You / Contact Information



Thank you for your participation and continued support of the ENERGY STAR program.

Please address all further questions and comments to:

 Katharine Kaplan, US EPA <u>kaplan.katharine@epa.gov</u> • (202) 343 – 9120