Breaking out of the Pack:
New Efforts to Identify Low-Carbon Products

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Ecos Consulting
Top Ten Makes it Easy to Buy the Most Efficient Products

Better climate. Lower bills. The most efficient products you can buy.

Supported By

ACEEE

www.toptenusa.org
Current Product List

- Medium televisions
- Large Refrigerators
- Laptop Computers
- Large Clothes Washers
- Extra-Large Refrigerators
- Large Monitors
- Large Televisions
- Dishwashers
- Freezers
- Light Trucks and 4WD SUVs
- Non-Expandable Desktops
- Small Monitors
- Cars
- Small Televisions
- Small Clothes Washers
- Medium-Sized Refrigerators

Coming Soon: Water Heaters and Room Air Conditioners
## Segmentation Example: TVs

<table>
<thead>
<tr>
<th>Number of Top Ten Models</th>
<th>Small (10 Models)</th>
<th>Medium (10 Models)</th>
<th>Large (10 Models)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15 to &lt;27</td>
<td>27-32</td>
<td>&gt; 32 to ≤37</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>&gt;37 to &lt;46</td>
<td></td>
<td>≥46 to &lt;52</td>
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<tr>
<td></td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>≥52</td>
<td></td>
<td>≥52</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>
Sample TV Selection Plot
We Can Do it All – One Stop Shopping

Televsions
Large Televisions > List View > #1

Samsung UN46C5000QF

Description:
This is a 46 inch LED-backlit TV
- Ranked by square inches of screen illuminated for every watt of electricity used: 18.9
- Annual Energy Use (kWh): 95
- Lifetime energy savings vs. average Energy Star product: 1062 kilowatt hours
- Lifetime cost savings vs. average Energy Star product: $61 to $205

Specifications:
- Display technology: LED-backlit LCD
- Screen size (Inches): 46
- Resolution: 1920 x 1080
- Automatic brightness control: Yes
- Power on (watts): 48
- Standby power use (watts): 1.0

Pricegrabber

<table>
<thead>
<tr>
<th>Seller</th>
<th>Seller Rating</th>
<th>Price</th>
<th>Available</th>
<th>Shop Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sears.com</td>
<td>★★★★★</td>
<td>$1249.89</td>
<td>yes</td>
<td>shop</td>
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<tr>
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<td>★★★★★ (11320 reviews)</td>
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<tr>
<td>PC Connection Express</td>
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<tr>
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<td>★★★★★ (1303 reviews)</td>
<td>$1245.00</td>
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</table>

Find it near you:
Enter Zip Code

Product Last Modified: September 14, 2010

Consumer Friendly Features
Energy Use
Price & Availability (Online)
Price & Availability (Local)
Rebate Information (if any)
What is EPEAT®?

Electronic Product Environmental Assessment Tool

- Guidance for Purchasers
  An environmental procurement tool designed to help IT purchasers address environmental concerns in their purchasing process for desktop computers, laptops, integrated systems and monitors.

- Guidance for manufacturers
  Provides clear and consistent performance criteria for the design of products and provides an opportunity for manufacturers to secure market recognition for efforts to reduce the environmental impacts of their products.
EPEAT® Performance Criteria

- Required & Optional Criteria
- **8 Performance Categories**
  - Environmentally Sensitive Materials
  - Materials Selection
  - Design for End of Life
  - Product Longevity/Life Cycle Extension
  - Energy Conservation
  - End of Life Management
  - Corporate Performance
  - Packaging
23 Required Criteria, including

- Most recent ENERGY STAR standard
- RoHS compliance
- Availability of OEM take-back and recycling
- Min. 65% recyclable/reusable
- Upgradeable with common tools
- Extended warranty available
- Elimination of toxic metals in packaging
- Company EMS, policy and reporting
### EPEAT® Registered Products

#### EPEAT Quick Search Tool
For Products Registered in United States

<table>
<thead>
<tr>
<th>Category</th>
<th>Bronze</th>
<th>Silver</th>
<th>Gold</th>
<th>Totals</th>
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</thead>
<tbody>
<tr>
<td>Desktops</td>
<td>2</td>
<td>31</td>
<td>74</td>
<td>107</td>
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<tr>
<td>Displays</td>
<td>1</td>
<td>93</td>
<td>94</td>
<td>188</td>
</tr>
<tr>
<td>Integrated Desktop Computers</td>
<td>0</td>
<td>33</td>
<td>11</td>
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<tr>
<td>Notebooks</td>
<td>30</td>
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<td>426</td>
<td>928</td>
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<tr>
<td>Thin Clients</td>
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<tr>
<td>Workstation Desktops</td>
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<td>0</td>
<td>10</td>
<td>11</td>
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<tr>
<td>Workstation Notebooks</td>
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<td>6</td>
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<td><strong>Total:</strong></td>
<td>34</td>
<td>639</td>
<td>620</td>
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US registrations as of 02/10/2010. See [www.epeat.net](http://www.epeat.net) for current numbers.
Thank you

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Ecos Consulting
ghardy@ecosconsulting.com
Segmentation Example: PCs

<table>
<thead>
<tr>
<th>ENERGY STAR Category</th>
<th>Desktop Market Segment</th>
<th>Laptop</th>
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<tbody>
<tr>
<td></td>
<td>Non-Expandables</td>
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<tr>
<td></td>
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<tr>
<td>A</td>
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<tr>
<td></td>
<td>2 &lt; 13” Diag. Screen</td>
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<td>B</td>
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<tr>
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<tr>
<td></td>
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</table>
Sample Laptop Selection Plot
EPEAT® Development

- 3-year multi-stakeholder process supported by US EPA to address difficulty with "green computer" sourcing
  - Extensive engagement of:
    - Environmental advocacy groups
    - Manufacturers, Technical Experts, Recyclers
    - Private and public purchasers
  - Consensus achieved on environmental criteria and the EPEAT® system
  - Board of Advisors from all stakeholder groups

EPEAT® is developed and guided by all stakeholders
EPEAT® Expansion

- Development of related IEEE standards
  - Printers/Imaging devices (underway)
  - TVs (underway)
  - Servers (Expected to start development 2011)
  - Mobile devices – cell phones, PDAs

- Update of computer standard – launch Spring 2010

- Internationalization
  - Country-specific registry launched 08/10/2009
  - Covers 41 regions – EU, EFTA, Japan, China, Taiwan, Singapore, Brazil, Mexico
  - Country addition process supports ongoing growth
EPEAT® Tiers

EPEAT Bronze
  – Meets all 23 mandatory criteria

EPEAT Silver
  – Meets all mandatory criteria
  and at least 50% of the optional criteria

EPEAT Gold
  – Meets all mandatory criteria and
  at least 75% of the optional criteria