

**A Guide for Energy Efficiency Program Sponsors  
Leveraging *ENERGY STAR Product Finder* “Advanced View”  
Last Updated June 18, 2014**

**Introduction**

It is now easier than ever to customize ENERGY STAR-certified product lists to suit your program needs. If your program requires promotion of a subset of efficient models in a product category, filtered views let you seamlessly identify and display only the models that meet your criteria while enabling you to leverage the valuable ENERGY STAR brand and the validation that comes from knowing all ENERGY STAR models are third-party certified to meet performance criteria and are subject to verification testing. (To learn more about third party certification requirements visit [energystar.gov/3rdpartycert](http://energystar.gov/3rdpartycert))

ENERGY STAR Product Finder now has new “Advanced View” functionality offered via Socrata, an open data platform for accessing public information. In addition to filtering ENERGY STAR product lists, you can use this tool to sort and visualize data to support program development and implementation. Filtered views and visualizations may be linked to or embedded in your webpage so they are automatically updated!

Below is just a sampling of the sort features available for product categories commonly promoted by Energy Efficiency Program Sponsors\*:

**Sample Filters Available through *ENERGY STAR Product Finder*  
(*product attributes in development appear in italics*)**

<b>Product Category</b>	<b>Unique filters</b>	<b>Cross-cutting filters</b>
Clothes washers	<ul style="list-style-type: none"> <li>• Load configuration</li> <li>• <i>Connected functionality</i></li> <li>• ENERGY STAR Most Efficient</li> </ul>	<ul style="list-style-type: none"> <li>• Brand name</li> <li>• Model name, model number, additional model information</li> <li>• ENERGY STAR unique model identifier</li> <li>• Date qualified</li> <li>• Date available on market</li> <li>• Markets</li> <li>• Energy use</li> <li>• Efficiency ratios</li> </ul>
Dishwashers	<ul style="list-style-type: none"> <li>• US federal standard</li> <li>• Water use</li> <li>• ENERGY STAR Most Efficient</li> </ul>	
Refrigerators	<ul style="list-style-type: none"> <li>• <i>Connected functionality</i></li> <li>• ENERGY STAR Most Efficient</li> </ul>	
Freezers	<ul style="list-style-type: none"> <li>• Defrost type</li> <li>• <i>Connected functionality</i></li> </ul>	
Room air conditioners	<ul style="list-style-type: none"> <li>• Reverse cycle</li> </ul>	
Dehumidifiers	<ul style="list-style-type: none"> <li>• Fan continuously operates</li> </ul>	

Light fixtures	<ul style="list-style-type: none"> <li>• Technology</li> <li>• Light output</li> <li>• CCT</li> <li>• CRI</li> <li>• Special features</li> <li>• Power factor</li> <li>• Light source Life</li> </ul>	<ul style="list-style-type: none"> <li>• Capacity</li> <li>• Product type</li> <li>• Meets ENERGY STAR Most Efficient Criteria</li> </ul>
Light bulbs	<ul style="list-style-type: none"> <li>• Technology</li> <li>• Base type</li> <li>• Light Output</li> <li>• CCT</li> <li>• CRI</li> <li>• Special features</li> <li>• Power factor</li> <li>• Life Rating</li> <li>• Warranty</li> <li>• Dimming capability</li> </ul>	
Pool pumps	<ul style="list-style-type: none"> <li>• Horsepower</li> <li>• Speed setting</li> </ul>	
Commercial refrigerators and freezers	<ul style="list-style-type: none"> <li>• Configuration</li> <li>• Door options</li> <li>• Refrigerant type</li> </ul>	
Commercial fryers	<ul style="list-style-type: none"> <li>• Shortening capacity</li> </ul>	
Commercial ice makers	<ul style="list-style-type: none"> <li>• Harvest rate</li> <li>• Ice hardness factor</li> <li>• Water use</li> </ul>	

\*Central heating and cooling products are also commonly promoted by efficiency programs; ENERGY STAR continues to work with AHRI and CEE to provide information on ENERGY STAR certified CAC/ASHP products through the CEE Directory at <http://www.ceedirectory.org/>.

Below we provide illustrative examples to demonstrate the new functionality and walk you through common tasks. Additional information on these new features is available at <https://data.energystar.gov/videos>.

### **Getting Started**

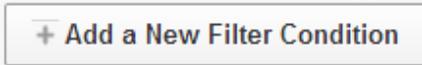
In order to save or share your work, you will need to create an account at <https://data.energystar.gov>.

1. Click on the “Sign Up” link on the top right of the page, and follow the prompts
2. After you’ve set up your account, you will be logged in. Go to <https://data.energystar.gov> to return to the datasets you would like to work with.

### **Creating a Filtered Dataset**

As an example of how to create a filter to show a subset of ENERGY STAR products, we will filter the residential clothes washer product list to highlight only products that have an MEF greater than 2.39 and a Water Factor less than 4.1 (CEE Tier 3). Note that filtered data views are already available for ENERGY STAR Most Efficient products.

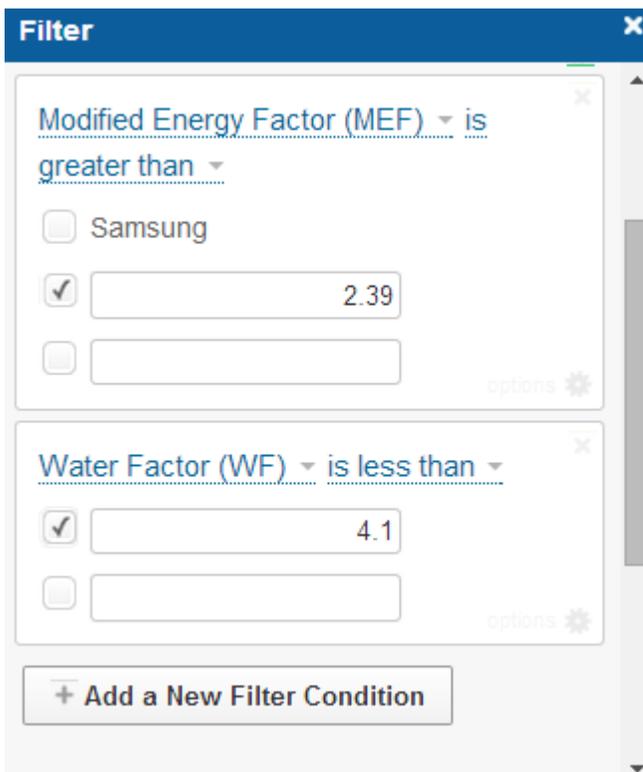
1. Go to <https://data.energystar.gov> and click the link “ENERGY STAR Certified Residential Clothes Washers” (alternately use the search feature and input “clothes washer.”)
2. Once the link is open, click the Filter button  in the top navigation bar
3. A new Filter frame should appear on the right side of the screen, click



4. Click on the down arrow next to [PD\\_ID](#) (the first attribute in the data set) and scroll down to select [Modified Energy Factor \(MEF\)](#); a new Filter

[Modified Energy Factor \(MEF\)](#) is [greater than](#) should appear in the Filter frame.

5. Click on the down arrow next to “is” and scroll to select “greater than”
6. In the box below, enter “2.39” and check the box to the left.
7. Repeat steps 3-6, selecting PD\_ID then Water Factor as the attribute, “less than” as the condition, and inputting “4.1” as the value.



The screenshot shows a 'Filter' panel with two filter conditions. The first condition is 'Modified Energy Factor (MEF) is greater than' with a checked checkbox and a text input field containing '2.39'. The second condition is 'Water Factor (WF) is less than' with a checked checkbox and a text input field containing '4.1'. Both conditions have an 'options' gear icon to their right. At the bottom of the panel is a button labeled '+ Add a New Filter Condition'.

8. If you wish to Sort the data based on highest to lowest MEF, click on [Sort & Roll-Up](#) above the filter subsection and select Sort. Then select Modified Energy Factor as the Column with Descending as the Direction. You may also add a column if you want to apply a secondary sort for other attributes. Scroll down and click [Apply](#)
9. You can export this data set using any of the options described in “Export Options” below or create an account to save and/or share this data view with others.

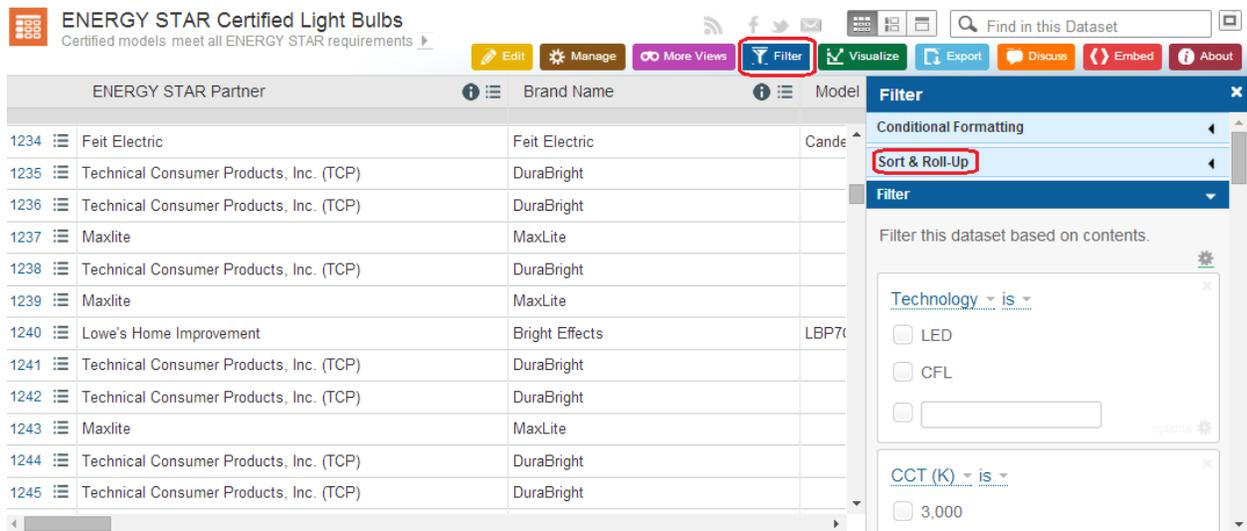
## Creating Visuals

Perhaps you are planning to modify the mix of technology you promote for your residential lighting program to include more specialty bulbs and want to share background with your team about the availability of ENERGY STAR certified models by bulb type.

### Number of Different ENERGY STAR Light Bulb Types

#### Part 1. Structure Data needed for Visual

1. Go to <https://data.energystar.gov> and click the link for the dataset you're interested in using.
2. On the top of the dataset click 
3. Click 



ENERGY STAR Certified Light Bulbs  
Certified models meet all ENERGY STAR requirements

ENERGY STAR Partner | Brand Name | Model

ENERGY STAR Partner	Brand Name	Model
1234	Feit Electric	Feit Electric
1235	Technical Consumer Products, Inc. (TCP)	DuraBright
1236	Technical Consumer Products, Inc. (TCP)	DuraBright
1237	Maxlite	MaxLite
1238	Technical Consumer Products, Inc. (TCP)	DuraBright
1239	Maxlite	MaxLite
1240	Lowe's Home Improvement	Bright Effects
1241	Technical Consumer Products, Inc. (TCP)	DuraBright
1242	Technical Consumer Products, Inc. (TCP)	DuraBright
1243	Maxlite	MaxLite
1244	Technical Consumer Products, Inc. (TCP)	DuraBright
1245	Technical Consumer Products, Inc. (TCP)	DuraBright

Filter panel options: Conditional Formatting, Sort & Roll-Up, Filter. Filter rules: Technology is LED, CFL; CCT (K) is 3,000.

4. Click 
5.  **Group By** allows comparison of items for the field selected.
  - a. For example, Bulb Type.
6.  **Roll-Up** is what you would like to count.
  - a. For example, model numbers.
  - b. Model numbers or PD\_ID, an EPA-generated identifier, is recommended if the visualization is intended to count number of models.
7. Roll Up Function allows counting of non-numeric fields, such as Brand Name, and provides additional options for numeric fields, such as energy use per year.

Unsaved View Save As... Revert

Based on ENERGY STAR Certified Light Bulbs  
Certified models meet all ENERGY STAR requirements as >

Edit Manage More Views Filter Visualize Export Discuss Embed About

	Bulb Type	Model Number
1	Bare Tube - Other	23
2	BA - Bulged with angular tip	2
3	Covered-Post	6
4	Covered	16
5	Other	6
6	Covered bullet	1
7	Covered Bullet	3
8	B - Bulged	21
9	Covered Post	30
10	Covered Candle	97
11	Covered A-line	329
12	Covered Globe	263
13	Covered Reflector	684

Filter

Roll-Ups & Drill-Downs

Group By Bulb Type

+ Add Grouping Column

Roll-Up Model Number

Function Count

+ Add Roll-Up Column

Sort

Apply Cancel

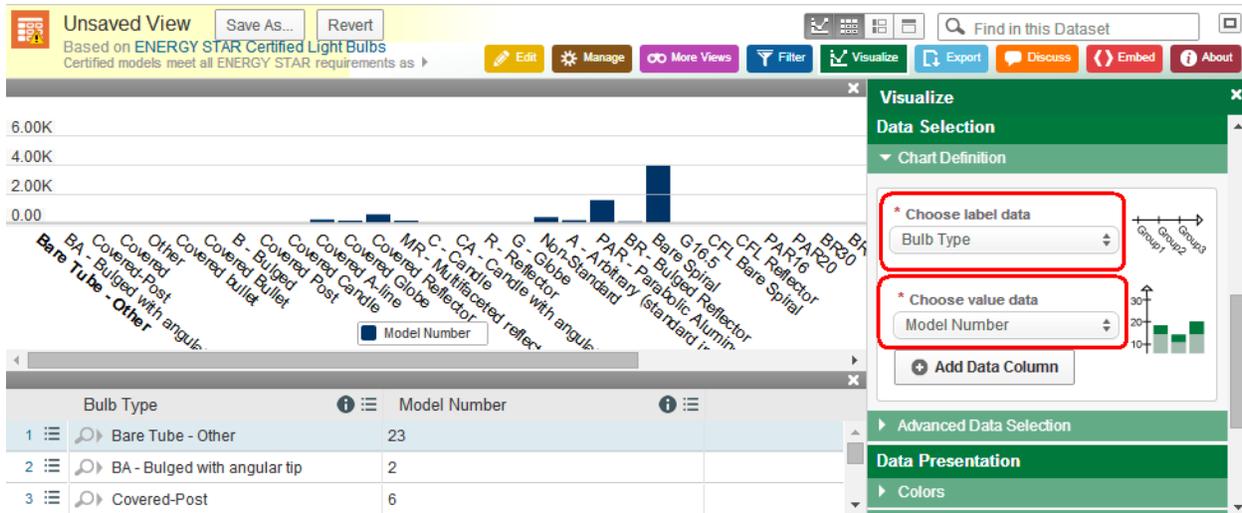
8. When finished, scroll down and click 
9.  if you would like to come back to the filter. You can also save at any point later when creating the visualization.

*Now you have a structured view of the product dataset and can proceed with creating a column chart, bar chart, pie chart, and many more visualizations.*

## Number of Different ENERGY STAR Light Bulb Types

### Part 2. Create Bar Chart

1. On the top of the dataset click 
2. In the Visualization section, click 
3. In **Data Selection** click 
  - a. Can alphabetize and group data by clicking 

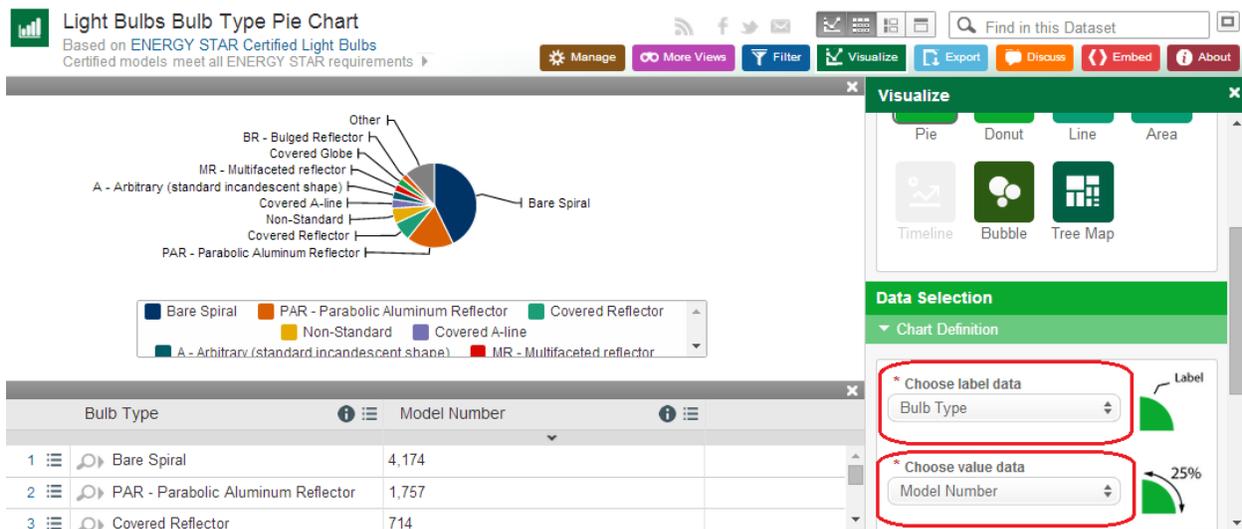


4. **Data Presentation** and **Chart Details** provide additional options for customizing the visual look of your graph including colors, labels and values, and several other options.

## Number of Different ENERGY STAR Light Bulb Types

### Part 3: Create a Pie Chart

1. On the top of the dataset click 
2. In the Visualization section, click 
3. In **Data Selection** click **Chart Definition** and select values for required fields.
  - a. For example, a pie chart based on a filtering of light bulbs by bulb type, counted by model numbers.



4. **Data Presentation** and **Chart Details** provide additional options for customizing the visual look of your graph including colors, labels and values, and several other options.

You may also want to view trends associated with energy use of products by size. The following example shows how you could look at the energy use of TVs by screen size.

## Energy Use of TVs by Screen Size

### Part 1. Structure Data needed for Visual

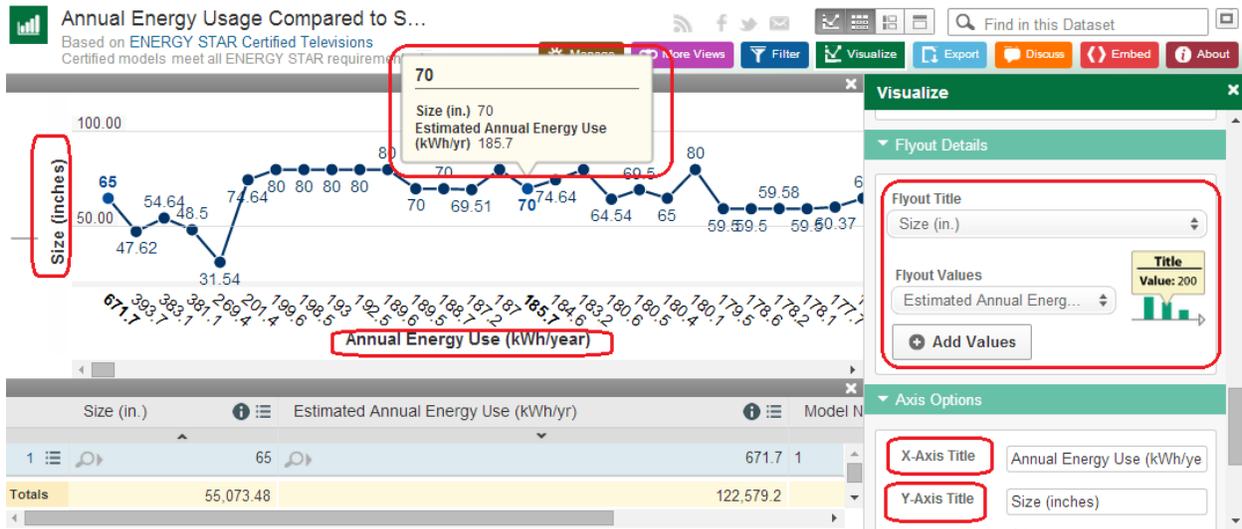
1. Go to <https://data.energystar.gov> and click the link for the dataset you're interested in using.
2. On the top of the dataset click 
3. Click **Sort & Roll-Up**
4. Click  **Roll-Ups & Drill-Downs**
5. **Group By** allows comparison of items for the field selected.
6. Select "Estimated Annual Energy Use (kWh/year)"
7. Click  then select "Size (in)".
8. **Roll-Up** is what you would like to count.
  - a. For example, model numbers.
  - b. Model numbers or PD\_ID, an EPA-generated identifier, is recommended if the visualization is intended to count number of models.
9. Roll Up Function allows counting of non-numeric fields, such as Brand Name, and provides additional options for numeric fields, such as energy use per year.
10. Click  **Sort**, select "Estimated Annual Energy Use (kWh/year)" and direction Descending.
11. Click  then select "Size (in.)" and direction Ascending.
12. Sorting function allows information to be more cleanly and quickly processed for displaying visuals.
13. When finished, scroll down and click 
14.  if you would like to come back to the filter. You can also save at any point later when creating the visualization.

## Energy Use of TVs by Screen Size

### Part 2. Create Line Chart

1. On the top of the dataset click 
2. In the Visualization section, click 
3. In **Data Selection** click  and select values for required fields.

4. For example, a pie chart based on a filtering of televisions by estimated annual energy use, counted by model numbers.
5. **Axis Options** allows for adding X-axis and Y-axis labels.
6. **Flyout Details** allows for selecting pop-up attributes when hovering over data.
7. **Data Presentation** and **Chart Details** provide additional options for customizing the visual look of your graph including colors, labels and values, and several other options.



## Embedding Visuals in Your Application

Once you have created and saved your visuals or filtered views, you can embed them in your application, by publishing your work using the  feature.

## Export Options

You are able to export datasets and filtered data views in a number of different formats using the  option and downloading the data. Options include CSV, JSON, PDF, RDF, RSS, XLS, XLSX, and XML.

Please note that for select datasets with greater than 65,000 rows, Socrata does not support downloading directly to xls or xlsx; however you can download these datasets as a CSV file and open using Excel with minimum loss of formatting.

Datasets are also available using the Socrata Open Data API (SODA). Further guidance on using the API is available at [data.energystar.gov/api/developers](http://data.energystar.gov/api/developers).

## Contact Us

Questions? Please email us at [energystarproducts@energystar.gov](mailto:energystarproducts@energystar.gov)