

ENERGY STAR Online Products Tools for Energy Efficiency Program Delivery

May 10, 2017







Agenda

- ENERGY STAR Overview
- ENERGY STAR Products List
- The API Tool
- Price & Location Tool
 - ENERGY STAR Most Efficient
- ENERGY STAR Best Value Finder Tool
- Ways to Save RSS feed





What is ENERGY STAR®?



The U.S. Environmental Protection Agency's ENERGY STAR is:

- A voluntary partnership among government, business and consumers to save money and protect our climate through superior energy efficiency
- a widely recognized and trusted mark on products, homes and buildings that meet strict energy efficiency requirements
- the simple choice for energy efficiency!





ENERGY STAR Sales Value

More than **90%** consumer awareness Consumer awareness and desire for efficiency savings is high.

45% of U.S. households knowingly purchased an ENERGY STAR certified product in the past year.

Of households that purchased ENERGY STAR products in the past year:

- Nearly 75% reported the label as influential in their purchasing decision;
- 85% of knowing purchasers reported that they are likely to recommend products that have earned the ENERGY STAR to friends.







ENERGY STAR Has a Dynamic Portfolio

- ENERGY STAR is constantly reevaluating the programs to ensure the energy efficiency measures are relevant to the current market.
- As barriers in the market arise, ENERGY STAR works to find solutions around these barriers

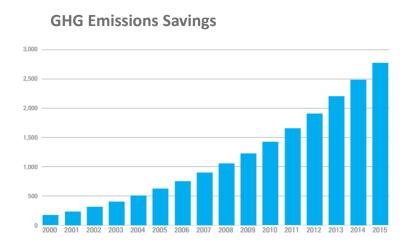


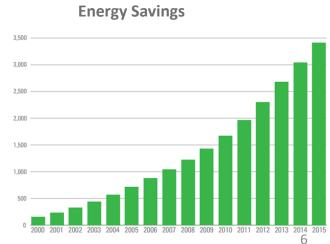




Program Impacts

- 25 years of partnerships
- Vast network of partners (nearly 20,000)
- Large savings over the last 2 decades:
 - Saved Americans \$362 billion on their utility bills
 - Avoided more than 2.5 billion metric tons of greenhouse gas emissions



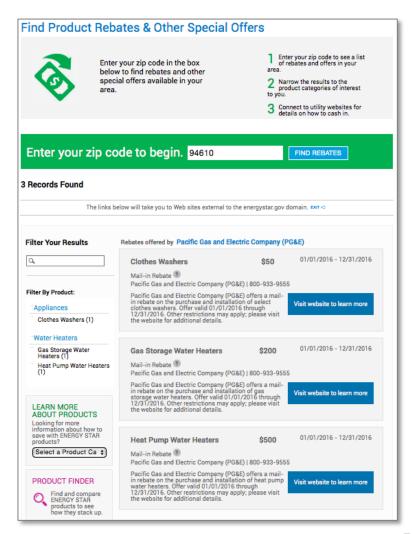






ENERGY STAR Rebate Finder

- Energy Efficiency Program Sponsors provide information on incentives
- Recently improved the process for updating information, as well as the user interface

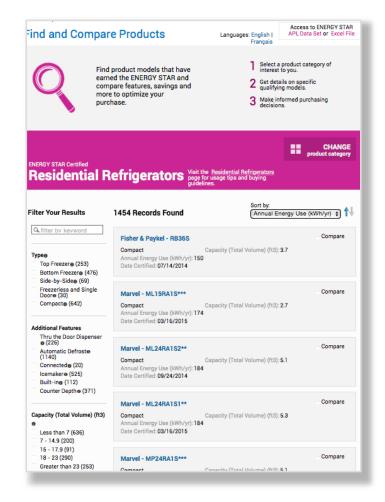






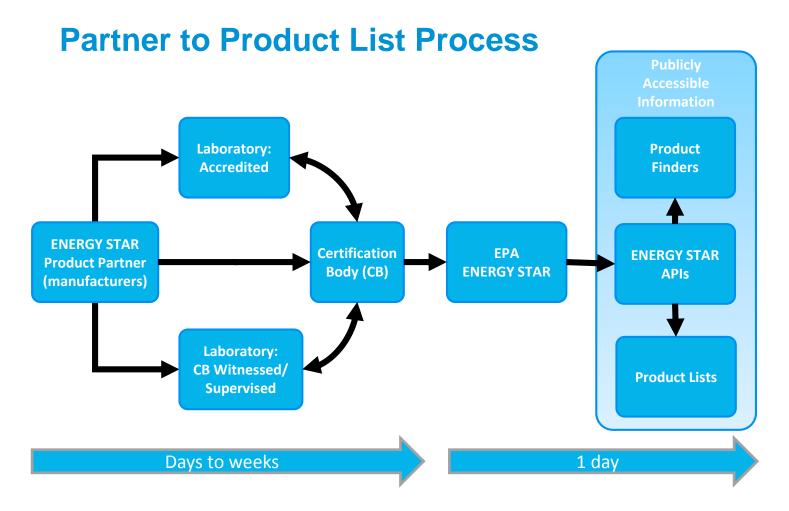
ENERGY STAR Product List Overview

- ENERGY STAR a trusted resource for identifying efficient products
- Dynamic, searchable product lists with information on performance and functionality (and adding availability)
- A sophisticated IT system reviews and accepts data from third party certifiers to populate the product finder
- Infrastructure includes APIs and extensive datasets of related product info, which can be downloaded







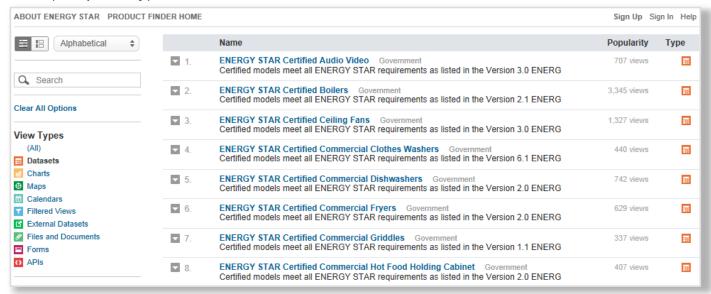






Product Lists

- Updated daily
- Custom filter options for retailers, partners, others
- Export options including Excel, .csv, APIs
- One portal where stakeholders access certified products data.energystar.gov
 - Note Excludes Windows, Non-AHRI CAC/ASHPs, and commercial boilers (temporarily)

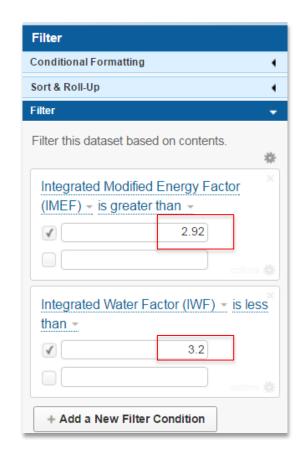






Filtering Datasets

- Multiple filters are available to search datasets
 - Example: Find the subset of products that meet a particular efficiency threshold above ENERGY STAR Clothes Washers
 - IMEF greater than 2.92 and IWF less than 3.2 (CEE Tier 3) Filter view: Click Filter
- Click on ENERGY STAR Unique ID and change it to the attribute you want to filter
 - ENERGY STAR Unique ID creates unique links for a model certified to a specific spec version
 - Allows users to track when models certified to a particular spec are added to the list or fall off the list







Filtering Datasets Continued

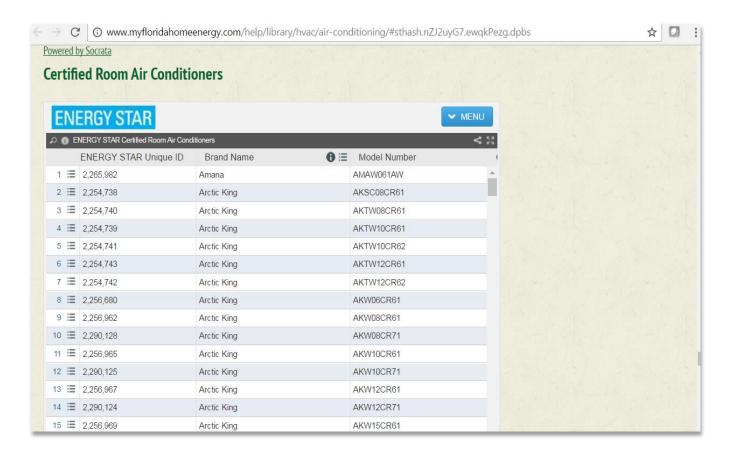
• Sample filters available

Product Category	Unique filters	Cross-cutting filters
Clothes washers Dishwashers Room air	 Load configuration US federal standard Water use ENERGY STAR Most Efficient Reverse cycle 	 Brand name Model name, model number, additional model information ENERGY STAR unique model identifier Date qualified
conditioners Light bulbs	 Technology Base type Light Output CCT CRI Special features Power factor Life Rating Warranty Dimming capability 	 Date available on market Markets Energy use Efficiency ratios Capacity Product type Meets ENERGY STAR Most Efficient Criteria Connected functionality
Commercial refrigerators and freezers Furnaces	 Configuration Door options Refrigerant type Fuel type Region 	





Embedding Datasets

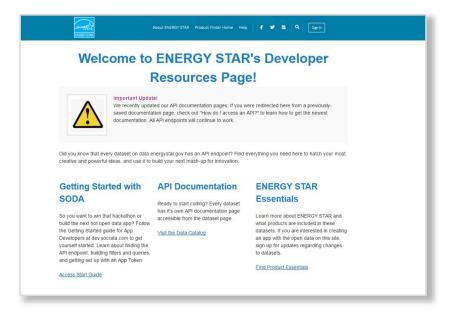






APIs

- Publishes Certified Products Data in machine readable format
- Accessible to any application with a connection to the web
- All dataset fields available through the API
- All of the tools mentioned today are built off of the API
- Open and free for anyone to use: data.energystar.gov/developers

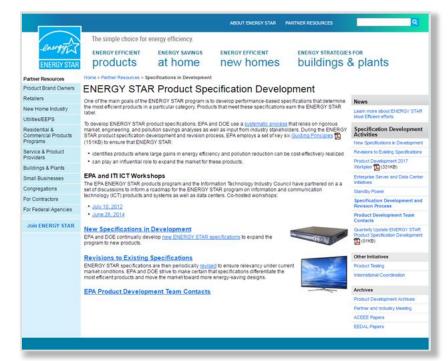






Changes to Datasets/APIs: Drivers

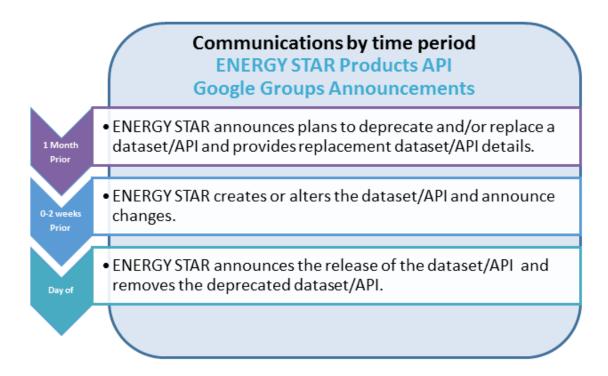
- New product specification (e.g., clothes dryers)
- Change to existing specification (e.g., boilers)
- Dataset updates (e.g., change in metrics for evaluating product performance)
- Visit <u>energystar.gov/productdevelopment</u>







Communication about Changes to Datasets

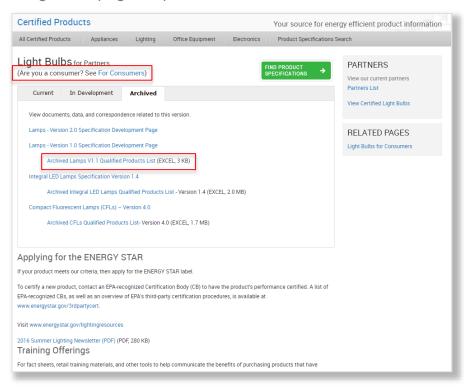






Archived Specification Lists

- Archived qualified product lists are kept on the energystar.gov website under the product specification search page at: www.energystar.gov/products
 - Ensure that you are looking at the page for partners and click the archived tab

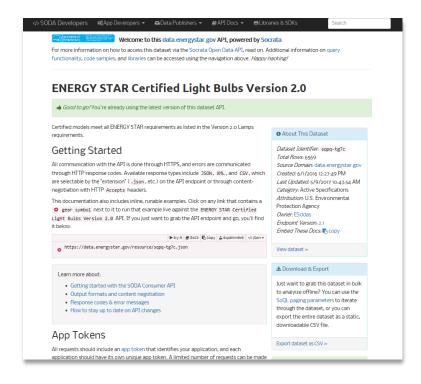






API Developers Next Steps

- Join Google Groups developer forum ENERGY STAR Products API
- Review website resources
 - <u>data.energystar.gov/develop</u>
 <u>ers</u>
 - ENERGY STAR Products APIs Essentials
 - links through /developers webpage

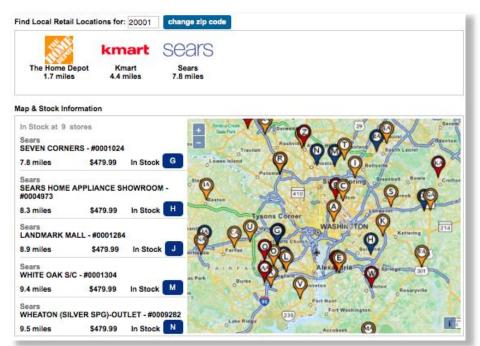


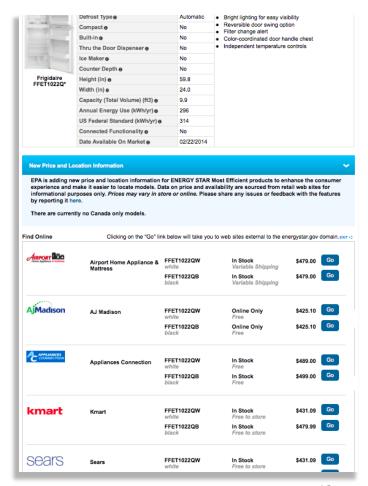




Price and Location Feature

 Designed to facilitate online research and instore purchases consistent with what consumers have come to expect from online shopping tools









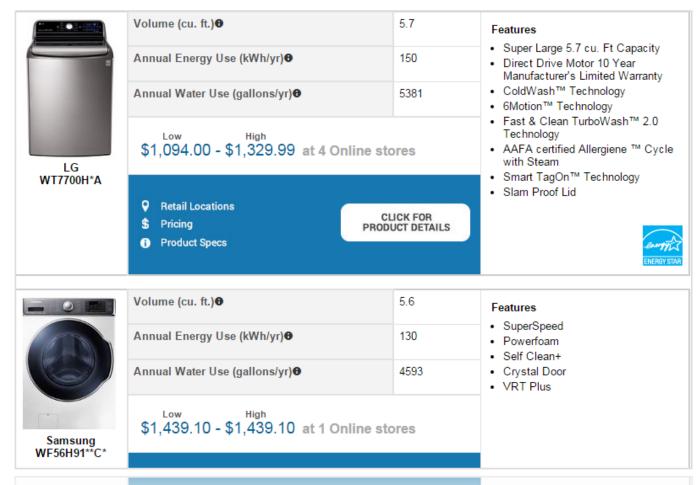
Price and Location Feature

- Introduced for ENERGY STAR Most Efficient products available at retail in 2016
- Provides information about online pricing to enrich the energystar.gov experience
 - Leverages public data already available
 - Zip code detection via IP address or manual input allows consumers to see stores nearby that sell specific ENERGY STAR models
 - Map feature allows consumers to get directions to stores
 - Provides links directly to retail pages with details on how to purchase the model
 - Data updated multiple times a day to deliver accurate pricing information
- Share in-store pricing where available to provide even more information to the consumer





Most Efficient Clothes Washers Page







ENERGY STAR Best Value Finder:A New Tool Leveraging Price & Location Functionality

- Goal: Make energy saving products and tips more accessible to low income or budget-constrained consumers
 - Highlight least cost, efficient options
 - Provide online and local options for researching and purchasing products
 - Provide buying tips and and information about rebates
 - Offer simple ways to reduce energy consumption and save money
- Why ENERGY STAR "Best Value" Finder?
 - Selected name based on market research
 - Enhances the ENERGY STAR brand, reflects positively on retailers and manufacturers, and should resonate with the cost-conscious consumer who is doing their research to find a smart deal.





The EE Opportunity: Starting with Refrigerators, Light Bulbs and TVs

LED Light Bulbs

- The need: Compared to average households, low-income households are less likely to have energy efficient bulbs. Utility low income program reps tell stories of visiting homes where bulbs are dead and not replaced.
- EE opportunity: LED bulb prices have significantly decreased. Long-lasting LED bulbs are available for under \$5, aided by local utility promotions.

Refrigerators

- The need: Low-income households are more likely to have older refrigerators.
- EE opportunity: Replacing an old refrigerator with a new one that has earned the ENERGY STAR could save you \$260 over the next five years. A number of utilities offer rebates towards the purchase of new ENERGY STAR refrigerators, and in some cases for recycling the old one.

TVs

- The need: Low-income consumers own almost as many televisions as middle-income and wealthy Americans.
- EE opportunity: Encourage purchase of an ENERGY STAR model.





New Addition: Room Air Conditioners

- The need: This purchase is highly price sensitive for all consumers. Most Room ACs are found in lower income homes.
- EE opportunity: There are more than 25 ENERGY STAR models under \$300. There is also a strong opportunity to convey tips about proper installation and right sizing to help improve consumer comfort while saving energy at the same time.







Best Value Finder Tool

- Went live in Fall 2016 now inviting partners to explore the functionality
- Obtains price data through real-time scraping of retail sites
- Look and feel of tool = a comprehensive bundle of resources accessible by web or mobile
 - Leverage price and location infrastructure to list models by lowest price available. User can select the features that are most important to them using the available filters.
 - Also offer mobile accessible site: low income are more likely to rely on their smartphones for internet access.
 - Provide rotating, adaptable content on energy saving opportunities
 - Targeted tips on purchasing and using products efficiently
 - Use consumer's zip code to show available rebates
 - Initial tool includes the rebates already provided to EPA by utilities
 - In the future would like to include links to low-income utility and other assistance programs





Best Value Landing Page



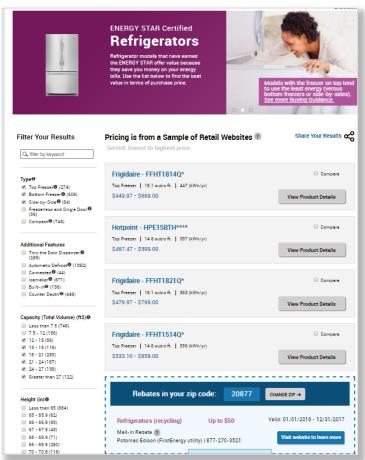
- Describes what the Best Value Finder offers
- Provides compelling facts for why users should visit the product pages
- Offers more ways to save focused on areas where you can save the most money.
 - Switching from paid TV to streaming
 - Setting back/up your thermostat when away
 - Adding insulation
 - Federal tax credits for water heaters
 - Installing low-flow showerheads
 - Learning what bulb you need for your fixture

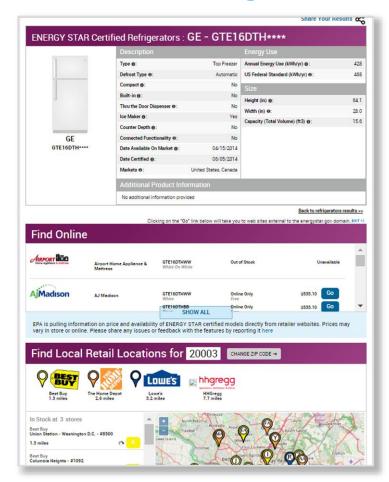


26



ENERGY STAR Best Value Finder – Refrigerators

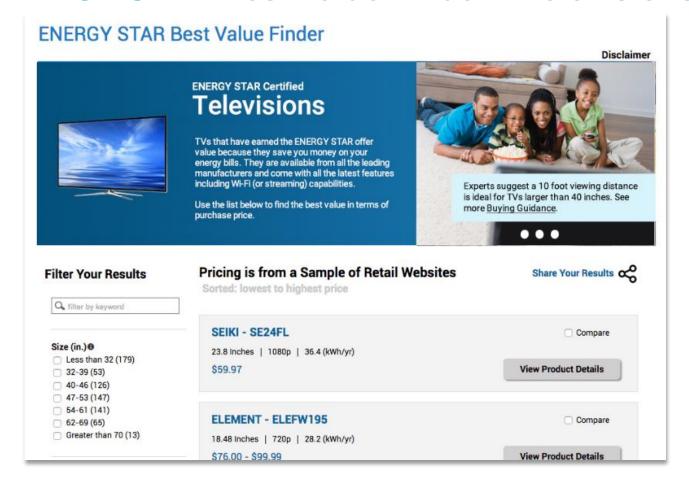








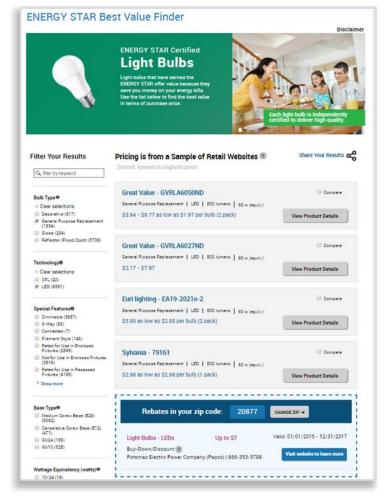
ENERGY STAR Best Value Finder – Televisions







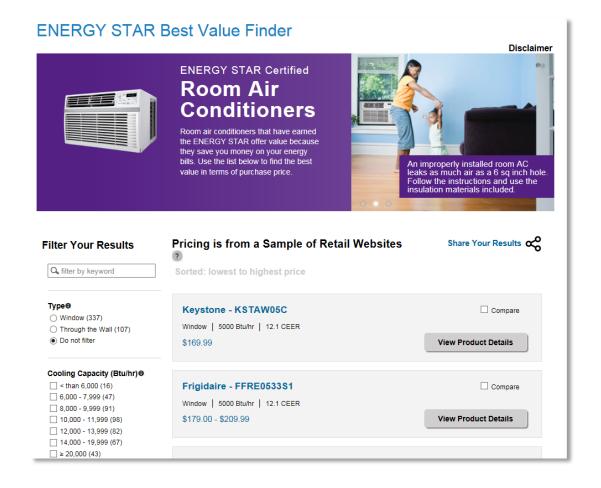
ENERGY STAR Best Value Finder – Light Bulbs







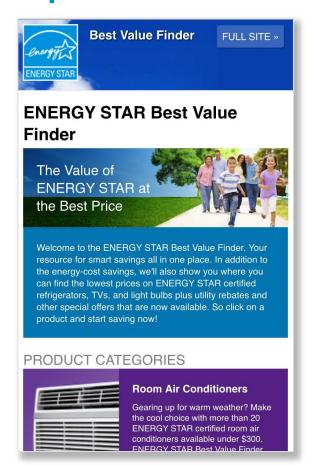
ENERGY STAR Best Value Finder – Room ACs

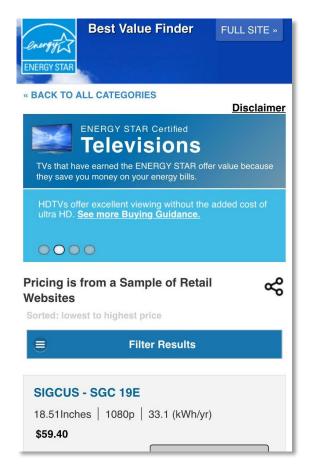






ENERGY STAR Best Value Finder – Mobile Capabilities









Best Value Finder Next Steps

- Starting to promote the tool through the Cool Choice for Room AC promotion
- Gathering input at the National Energy Utility Affordability Council (NEUAC) annual meeting in June
- We welcome your feedback!







ENERGY STAR Ways to Save RSS Feed

- A web service that provides an ongoing stream of ENERGY STAR branded, energy-saving tips to external web sites that adopt the service. Tips include:
 - All the tips from My ENERGY STAR
 - Content from national product promotions
 - Any and all additional content, as available. No limits!
- Tips can be customized (filtered) by partners based on specific product categories and/or types based on partner interest.
- Each tip includes a link back to energystar.gov.







Benefits For Partners

- Fresh and Frequent Content
 - Increase the amount of content that changes on your page(s) to show search engines that your page is worthy of receiving a boost in the search results.
 - Increase the frequency of the changes to give search engines a reason to crawl your site more often.
 - Give visitors more options for engaging with your page.
- ENERGY STAR Brand Affiliation
 - ENERGY STAR is a trusted brand that provides credibility to your site and confidence to your site visitors.
 - Displaying ENERGY STAR branded content next to your own content creates a connection that can improve the perceived value of your content.
- One and Done
 - Once the web service is adopted, you're done. You do not have to think about it again. The service continues to serve up fresh content to your site providing ongoing benefits to your users and web page performance.





How Does it Work?

- 3 header sizes / widths for feed –
- ENERGY STAR WAYS TO SAVE TO

- 768px by 95px
- 320px by 150px
- 240px by 110px



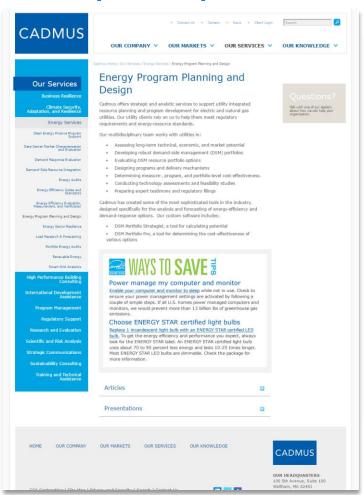


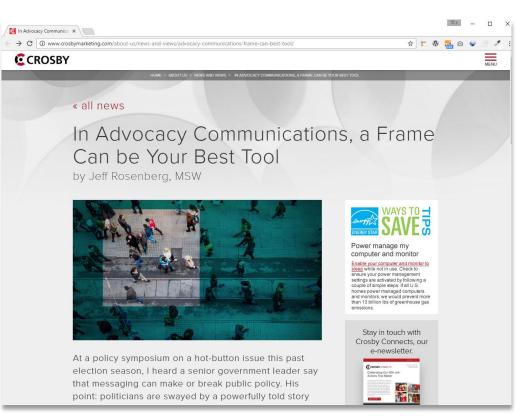
- Terms of use
 - Must use one of the three header graphics above the WTS feed
 - WTS feed must use a white background color
 - Feed content should be left aligned with the left edge of the ENGERY STAR
 Certification Mark
 - Full tip content must be displayed, with any accompanying hyperlinks
 - Feed must show at least one and at most five tips at all times
 - If there are more relevant tips than fit in the allocated space, tips can be randomized within the selected grouping





Example Comps









How to Get Started?

- Ways to Save Tips web service will be available at: energystar.gov/waystosavetips
 - This page will allow users to select preferences related to tips, such as product type.
 - Product specific selections would provide a custom URL with relevant tip content (ex. energystar.gov/esapi/tips?category=lightbulbs)





Homa		
Choose Category Options to	generate your custom URL:	
How would you like your tipe?		
O JSON (tigs will be delivered in JSON forms	MD	
O Javasoript (code that can be embedded on	your site)	
Appliances (check sit)		
Clothes Dryers (1)		
blectronics [](check elf)		
Displays (2)	Sel-top Boxes & Cable Boxes (1)	Sistes and Tablets (2)
Heating & Cooling (check all)		
Air-Source Heat Pumps (2)	☐ Solers (2)	Central Air Conditioner (2)
Seal and Insulate (1)		
Lighting (check all)		
Ught Bulbs (1)		
Office Products (check sill)		
Computers (2)	Imaging Equipment (1)	
Get Your Custom Code		
38.100 SMM SM		
Download the following hea	ders for use:	
14/41/0.7	O O ALVE TIDO	
Compton	O SAVE TIPS	
ENERGY EXAMPLE VICTOR IN	UDAVEIIIU	
T 2VAVA T	0 -	
WAIST		
- Altron		
ENERGY STAR	L O	
WAYS TO -		
CAVE T		
ENERGY STATE DAVE OF		





Resources

- energystar.gov/productfinder
 - Product finder tools
 - Guide on creating filters and visuals
 - Macro for segmenting additional models
- data.energystar.gov
 - Product lists and API field names.
 - EPA-created filters, charts, and graphs
- data.energystar.gov/developers
 - ENERGY STAR Products API essentials
 - Getting started with APIs
- ENERGY STAR Products API Google Group
- energystar.gov/best-value-finder
- energystar.gov/mostefficient
- Ways to Save Tips Web Service: energystar.gov/waystosavetips





Thank You!

Kathleen Vokes EPA, ENERGY STAR (202) 343-9019

Vokes.Kathleen@epa.gov

Melissa Fiffer

EPA, ENERGY STAR

(202) 343-9464

Fiffer.Melissa@epa.gov

Jill Vohr EPA, ENERGY STAR (202) 343-9002 Vohr.Jill@epa.gov

Don't know your account manager? Contact

eeaccountmanager@icf.com

