

## ENERGY STAR Products Database

Kathleen Vokes, US EPA November 20, 2014







Every single day, consumers choose ENERGY STAR products more than



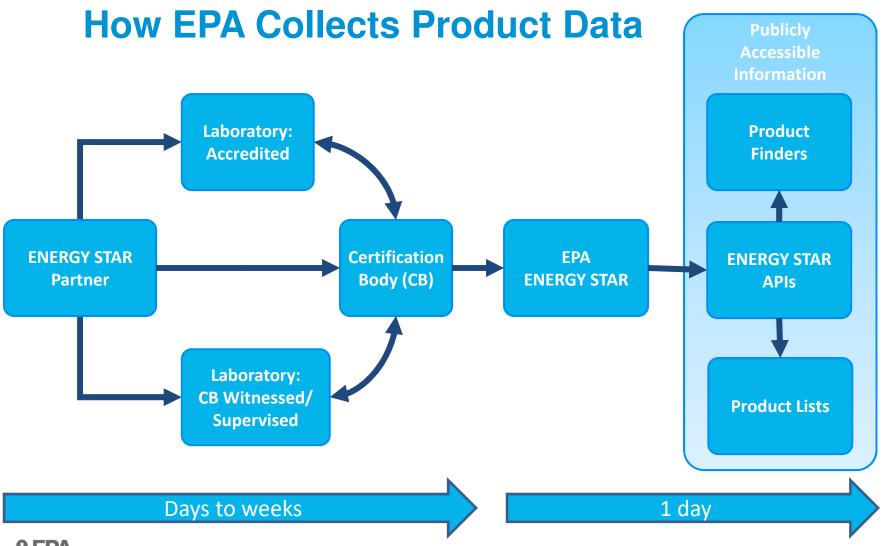
#### **ENERGY STAR Products Database**

- One portal where stakeholders access datasets on certified products\* data.energystar.gov
- Updated daily

ABOUT ENERGY STAR PRODUCT FINDER HOME			Sign Up Sign In Help	
≣		Name	Popularity	Type
Clear All Options  View Types (All)  Datasets	☑ 1.	ENERGY STAR Certified Audio Video Government Certified models meet all ENERGY STAR requirements as listed in the Version 3.0 ENERG	707 views	<b>■</b>
	₹ 2.	ENERGY STAR Certified Boilers Government Certified models meet all ENERGY STAR requirements as listed in the Version 2.1 ENERG	3,345 views	<u>=33</u>
	▼ 3.	ENERGY STAR Certified Ceiling Fans Government Certified models meet all ENERGY STAR requirements as listed in the Version 3.0 ENERG	1,327 views	<b>=</b> 33
	▼ 4.	ENERGY STAR Certified Commercial Clothes Washers Government Certified models meet all ENERGY STAR requirements as listed in the Version 6.1 ENERG	440 views	<b>■</b>
<ul><li>d Charts</li><li>⊕ Maps</li></ul>	▼ 5.	ENERGY STAR Certified Commercial Dishwashers Government Certified models meet all ENERGY STAR requirements as listed in the Version 2.0 ENERG	742 views	<b>=</b> 55
☐ Calendars ▼ Filtered Views External Datasets	<b>▼</b> 6.	ENERGY STAR Certified Commercial Fryers Government Certified models meet all ENERGY STAR requirements as listed in the Version 2.0 ENERG	629 views	<b>=</b> 00
<ul><li> Files and Documents</li><li> Forms</li><li> APIs</li></ul>	₹ 7.	ENERGY STAR Certified Commercial Griddles Government Certified models meet all ENERGY STAR requirements as listed in the Version 1.1 ENERG	337 views	<u>=00</u>
	■ 8.	ENERGY STAR Certified Commercial Hot Food Holding Cabinet Government Certified models meet all ENERGY STAR requirements as listed in the Version 2.0 ENERG	407 views	<b>=</b> 55











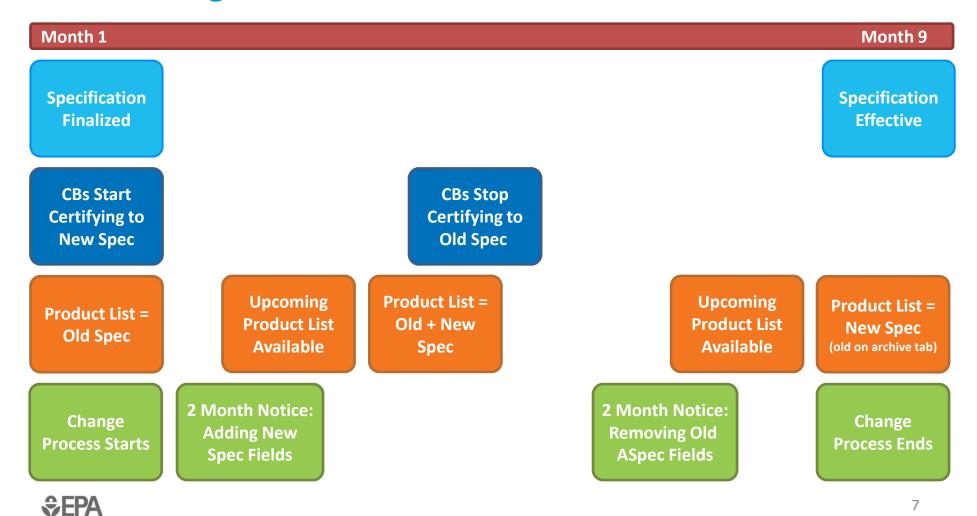
#### **Changes to Datasets: Drivers**

- 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 energystar.gov/productdevelopment





#### **Changes to Datasets: Process**

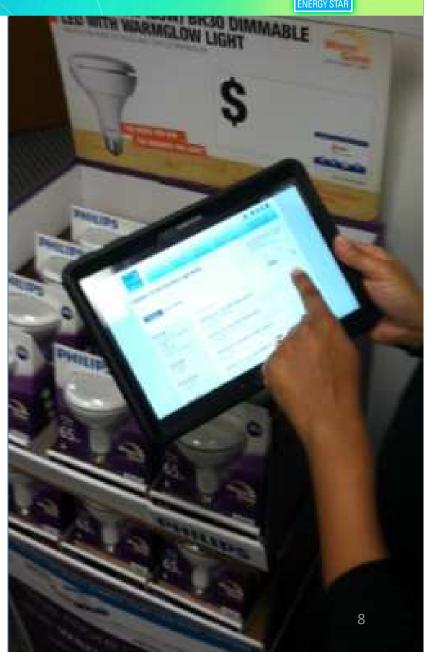




#### **ENERGY STAR data**

informs consumer purchases, energy efficiency promotions and specification updates

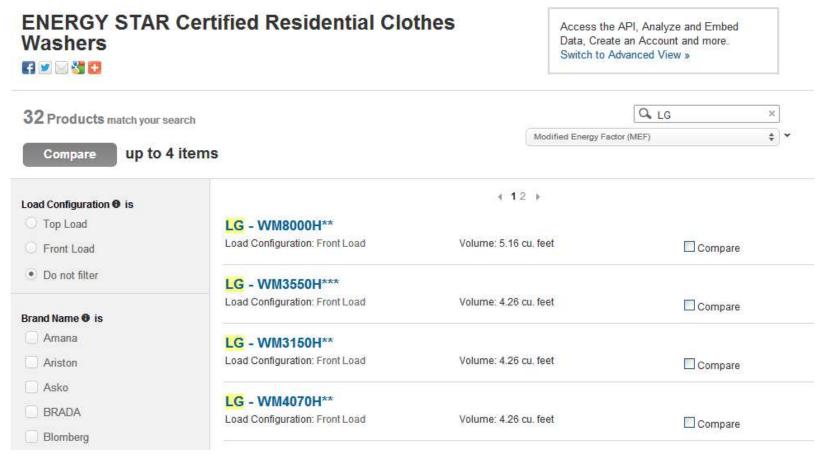
- Consumers and energy efficiency sponsors can easily find product information – mobile version also available
- Advanced view provides more options for analyzing data to support energy efficiency promotions and specification development activities
- APIs for each dataset allow energy efficiency sponsors direct, automated access to data





#### **Consumer Product Finders**

Provide consumers, retailers, utilities and other stakeholders with easy access to product data







#### **Advanced View Features**

- Create account to save and share work
- Filter lists (sample filters)
- Create visuals
- Embed
- Export data

Product Category	Unique filters	Cross-cutting filters
Clothes washers	<ul><li>Load configuration</li><li>Connected functionality</li><li>ENERGY STAR Most Efficient</li></ul>	<ul><li>Brand name</li><li>Model name, model number, additional model</li></ul>
Dishwashers	<ul><li>US federal standard</li><li>Water use</li><li>ENERGY STAR Most Efficient</li></ul>	<ul><li>information</li><li>ENERGY STAR unique model identifier</li></ul>
Refrigerators	<ul><li>Connected functionality</li><li>ENERGY STAR Most Efficient</li></ul>	<ul> <li>Date qualified</li> <li>Date available on market</li> <li>Markets</li> <li>Energy use</li> </ul>
Room air conditioners	Reverse cycle	
Light bulbs	<ul> <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>	<ul> <li>Efficiency ratios</li> <li>Capacity</li> <li>Product type</li> <li>Meets ENERGY STAR Most Efficient Criteria</li> </ul>
Commercial refrigerators and freezers	<ul><li>Configuration</li><li>Door options</li><li>Refrigerant type</li></ul>	10





#### **APIs for 42 Datasets**

- Application Programming Interface (API)
- Publishes Certified Products Data in machine readable format
- Accessible to any application with a connection to the web
- EPA uses the API to power the consumer product finder
- Open and free for anyone to use data.energystar.gov/developers





### **Database Strengths**

- Detailed certified product information on over 45,000 models
  - Product information varies by category –500 fields for data center storage
- Current information
  - Updated frequently
  - Program structure provides incentive for CBs/Partners to only list available products
  - Publishes Certified Products Data in machine readable format
- Accessibility
  - Data available in many formats pdf, excel, APIs, etc
  - Applications for searching filtering, sorting, and analyzing lists
- Detailed change process for updating lists





#### **Database Challenges**

- Model Identifiers SKUs, UPC codes, detailed model numbers, part numbers, retailer numbers
  - CBs do not often provide additional model information that would allow energy efficiency program implementers to match products in EPA's database with models in the store

Barrier: Compliance departments and OEMs managing the certification process don't always provide extra information that would enhance marketing efforts

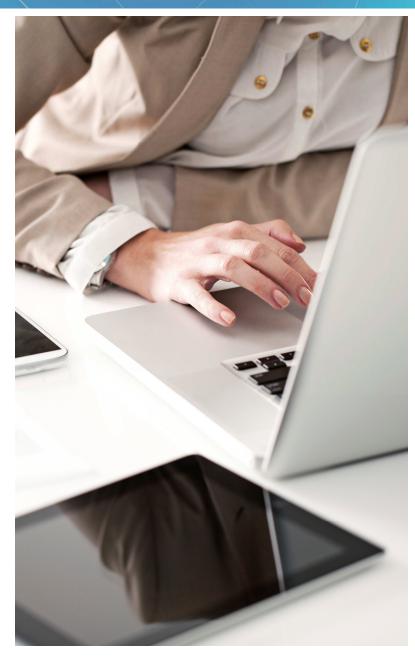
- Data Quality and Robustness
  - CBs do not always enter all required data for each product
  - CBs occasionally enter incorrect information into the system

Barrier: Some CB processes are still manual allowing for data entry issues

Solution: Building additional layers of semi-automated data quality checks







#### 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



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