ENERGY STAR Products Scope 3 Calculator

June 23, 2021

RETAIL INDUSTRY LEADERS ASSOCIATION

The Retail Industry Leaders Association (RILA) is the US trade association for retailers that have earned leadership status by virtue of their sales volume, innovation or aspiration. We convene decision-makers to collaborate and gain from each other's experience. We advance the industry through public-policy advocacy and promote operational excellence and innovation. And through research and thought leadership, we propel developments that foster both economic growth and sustainability.

Our aim is bold but simple: to elevate a dynamic industry by transforming the environment in which retailers operate.

https://www.rila.org

RETAIL COMPLIANCE CENTER

The Retail Compliance Center has a number of resources related to environmental compliance and sustainability that apply in retail including introductory information as well as detailed reviews of regulations and variations in state requirements.

www.rila.org/rcc

RETAIL COMPLIANCE CENTER

- Webinars
- Fact Sheets
- Tracking Matrices
- Retail Advisor
- Newsletters

HOUSEKEEPING

Everyone is muted upon entry
- This reduces background noise during the webinar.

Recording
- The webinar is being recorded and will be housed on the RCC site for future views. The slide deck will also be posted to the RCC site.

Posing a question/commenting
- Please use the Q&A box to pose questions or comments.
- Questions and comments posed will go directly to the speakers and moderators.
- Questions will be answered after the conclusion of the speakers' presentation.

Webinar Feedback Survey
- Survey launched during Q&A as live poll

ANTITRUST STATEMENT

RILA believes strongly in competition. Our antitrust laws are the rules under which our competitive system operates. It is RILA's policy to comply with both the letter and the spirit of antitrust laws. This Antitrust Statement has been adopted to avoid even the appearance of impropriety under the antitrust laws.

At any association meeting, participants must avoid any discussion of the following subjects in order to avoid even an appearance of impropriety:

- **Do not** discuss current or future prices, price quotations or bids, pricing policies, discounts, rebates, or credit terms.

- **Do not** discuss cost information such as production costs, operating costs, or wage and labor rates.

- **Do not** discuss profits or profit margins, including what is a "fair" profit margin.

- **Do not** discuss allocating markets, territories, or customers.

- **Do not** discuss current or future production or purchasing plans, including plans to take facility downtime, production quotas, or limits on output.

- **Do not** discuss refusing to deal with any suppliers, customers, or competitors (or any class or type of suppliers or customers).

- **Do not** require or pressure any supplier, customer, or competitor to adopt any particular actions or policies.

- Never agree on any aspect of future pricing or output.

Do not engage in prohibited discussions before a meeting or after a meeting is over. These antitrust guidelines apply not only in formal RILA meetings, but also in hallways, casual conversations, phone calls, emails, text messages, cocktail parties, golf outings, or any other setting that is related in any way to the RILA. If you have questions or concerns, or if you are uncertain about the propriety of any subject of discussion or proposed activity, you should stop the discussion immediately and bring the issue to the attention of RILA staff or consult your company's general counsel.

WEBINAR OVERVIEW

➢ How the ENERGY STAR Scope 3 Calculator works and how it was developed

➢ How the Calculator can count as well as help reduce future emissions

➢ What impact ENERGY STAR certified products can have on achieving corporate carbon emission goals

TODAY'S SPEAKERS

Daniel Cronin
ENERGY STAR Program Manager,
EPA

Brynn Albrecht
Associate Manager of
Environmental Sustainability,
Best Buy

ENERGY STAR® Scope 3 Use of Sold Products Analysis Tool

Tool Overview and Opportunities for Retailers

June 23, 2021

Scope 3 + ENERGY STAR Tool Agenda

1. Overview of Scope 1, 2, & 3

2. ENERGY STAR Overview & Data Quality Background

3. Methodology

4. What is the Scope 3 opportunity for ENERGY STAR & Retailers?

5. Overview of the tool

Poll Question

How familiar are you with Scope 3 GHG Emissions?

- Very familiar

- Somewhat familiar

- Slightly familiar

- Not familiar at all, I'm new to this!

GHG Protocol Scope 1, 2, 3 Emissions & ENERGY STAR
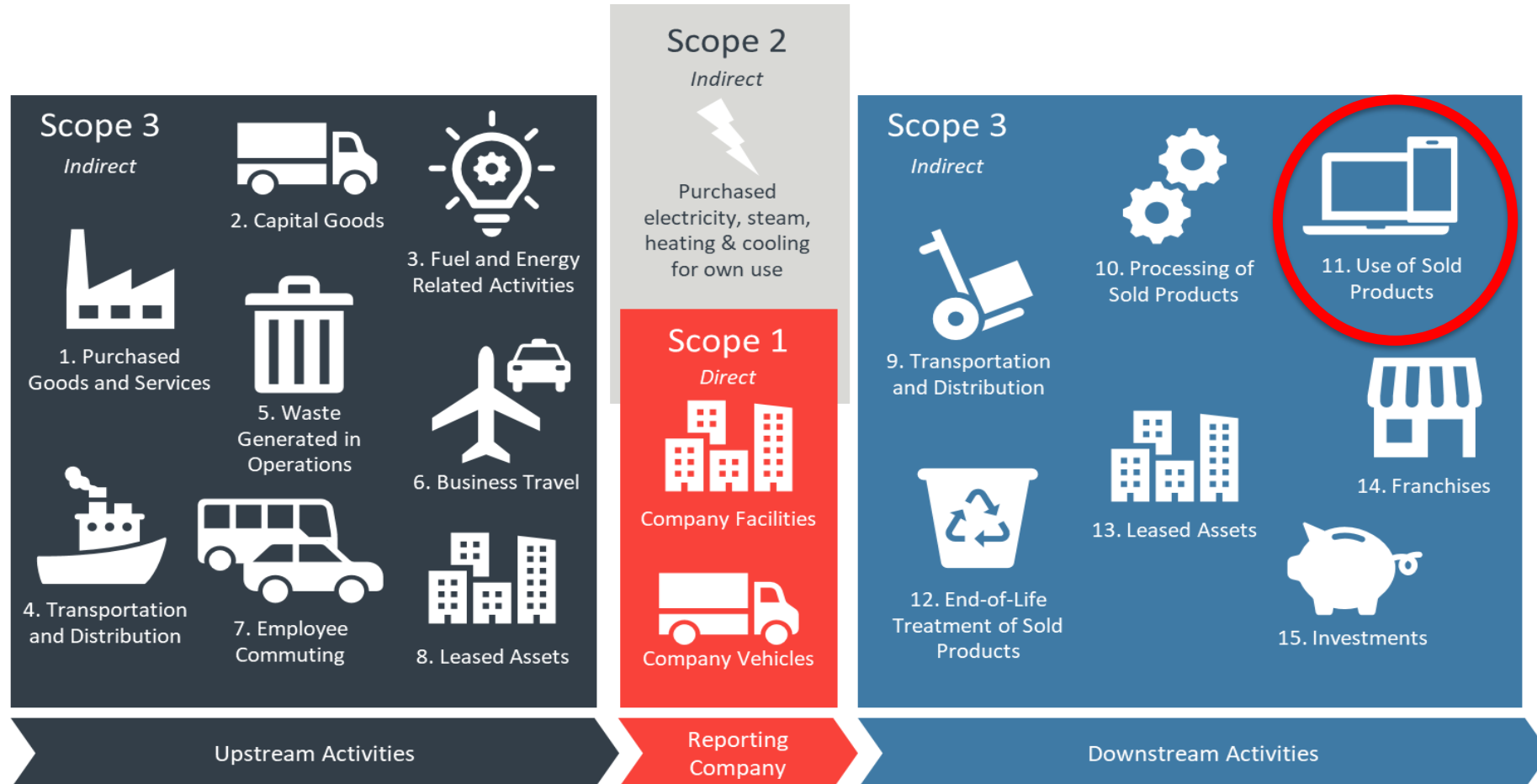
What products does ENERGY STAR cover? Over 75 categories!

Residential Appliances
Commercial Appliances
Data Center Equipment
Electronics
HVAC
Lighting
Office Equipment
Electric Vehicle Chargers
Lab Grade Refrigeration
Pool Pumps
Water Heaters
(& Many More)

ENERGY STAR. The simple choice for energy efficiency.

Poll Question

Do you sell ENERGY STAR products?

- Yes
- No
- Unsure

ENERGY STAR & Data Quality – Our "Secret Sauce" in the GHG Reporting World

Product Development

- EPA has a rigorous PD process in place in which we examine the savings potential of a given product category. If significant performance differentiation exists in that category, EPA sets a performance minimum to ID the top ~25% of the category. This is a general guideline and not a rule.

Data Quality/Assumptions

- For every 'covered' product for which there is a federal minimum performance standard (e.g., clothes washers, clothes dryers) EPA leverages Department of Energy performance data.
  - o For products that are not 'covered', EPA conducts extensive research to create a baseline performance assumption and a minimum performance requirement.

Third Party Certification

- Every ES product must be tested in an accredited lab before it earns the ES. These lab reports are then sent to certification bodies (CB) (e.g. UL, Intertek) where they are evaluated for ES compliance. If compliant, the CB uploads the product data directly to energystar.gov.

Methodology + Assumptions Used in This Tool

- Analyzes emissions from products contained in the ENERGY STAR Certified Products 2020 Data Book. All product data comes from the Databook.

- We only use the scope 1 emission factors for fuel use (natural gas and heating oil) and the scope 2 factor for electricity use (eGRID U.S. Average).

- eGRID's U.S. Average emission factor is used for electricity

- Lighting lifetime (Halogens vs CFL and LED).

- Emission factors for natural gas and heating oil are from U.S. EPA GHG Emission Factors Hub.

- Global warming potentials used are from IPCC's Fourth Assessment Report, 2007 (AR4) which align with other EPA products and the U.S. GHG Inventory.

EPA

Poll Question

Does your organization have a GHG reduction goal? If so, does that goal include Scope 3?

- Yes, we have a goal for Scopes 1, 2, & 3

- Yes, we have a goal for Scopes 1& 2

- No, we do not have a goal for GHG reduction

- Not sure

EPA

The Opportunity for Retailers

1. **Scope 3 Emissions & Retail –** Use of sold products is usually the largest single source of emissions for retailers.

2. **Scope 3 in Corporate Sustainability Reports/Carbon Disclosure Project Reports**: This tool can help create the underlying savings figures and emissions disclosures for a CDP or CSR.

3. **Standardize Savings Assumptions:** To standardize savings assumptions across the retail landscape, ENERGY STAR provides baseline and savings assumptions. No need to invent your own savings assumptions for any ES category.

4. **Quick walkthrough of the tool →**

EPA

Office Equipment

Lifetime

Product Type	Total Unit Sales	% of Current Sales that are ENERGY STAR	Enter a Higher % of Sales that are ENERGY STAR for Analysis
Workstation	200,000	30.00%	60.00%
Printer (Mono, Laser)	200,000	30.00%	60.00%
Multifunction Device (Mono, Laser)			
Printer (Color, Laser)	200,000	30.00%	60.00%
Multifunction Device (Color, Laser)			
Multifunction Device (Inkjet)			

Getting Started | Product Emissions Analysis | Summary Results | Summary Results - Figures

ENERGY STAR Scope 3 Tool Walkthrough – Sales/ES Data Input

		Current			
Total ENERGY STAR Product Sales	Total Standard Product Sales	Lifetime Product Use Emissions - ENERGY STAR (Metric Tons CO2e)	Lifetime Product Use Emissions - Standard (Metric Tons CO2e)	Lifetime Total Product Use Emissions (Metric Tons CO2e)	Lifetime Emissions Savings from ENERGY STAR Product Sales (Metric Tons CO2e)
60,000	140,000	94,911	303,508	398,419	35,164
60,000	140,000	3,630	12,102	15,732	1,556
-	-	-	-	-	-
60,000	140,000	3,942	15,732	19,674	2,801

ENERGY STAR Scope 3 Tool Walkthrough – Sales/ES Data Input

			Increased ENERGY STAR Sales			
Total ENERGY STAR Product Sales	Total Standard Product Sales	Lifetime Product Use Emissions - ENERGY STAR (Metric Tons CO2e)	Lifetime Product Use Emissions - Standard (Metric Tons CO2e)	Lifetime Total Product Use Emissions (Metric Tons CO2e)	Lifetime Emissions Savings from ENERGY STAR Product Sales (Metric Tons CO2e)	Additional Lifetime Emissions Savings Achieved with Increased ENERGY STAR Sales (Metric Tons CO2e)
120,000	80,000	189,822	173,433	363,255	70,328	35,164
120,000	80,000	7,261	6,915	14,176	3,112	1,556
-	-	-	-	-	-	-
120,000	80,000	7,883	8,990	16,873	5,601	2,801
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-

ry Results | Summary Results - Figures | Pr ... ⊕ ⋮ ◀

ENERGY STAR Scope 3 Tool Walkthrough – Savings Narrative

Key Takeaways

Currently, you sell 465,000 ENERGY STAR products, and have total reported Scope 3 Use of Sold Product emissions of 337,079 metric tons CO2e. With the increase in ENERGY STAR product sales, you sell 930,000 ENERGY STAR products, and have total reported Scope 3 Use of Sold Product emissions of 300,457 metric tons CO2e (a change of -36,622 metric tons CO2e).

By selling an additional 465,000 ENERGY STAR products you increase lifetime emissions savings to 73,245 metric tons CO2e, equal to 24.38% of your new Scope 3 Use of Sold Product emissions reported. This is a lifetime emissions savings increase of 36,622 metric tons CO2e, equal to 10.86% of current Scope 3 Use of Sold Product emissions reported.
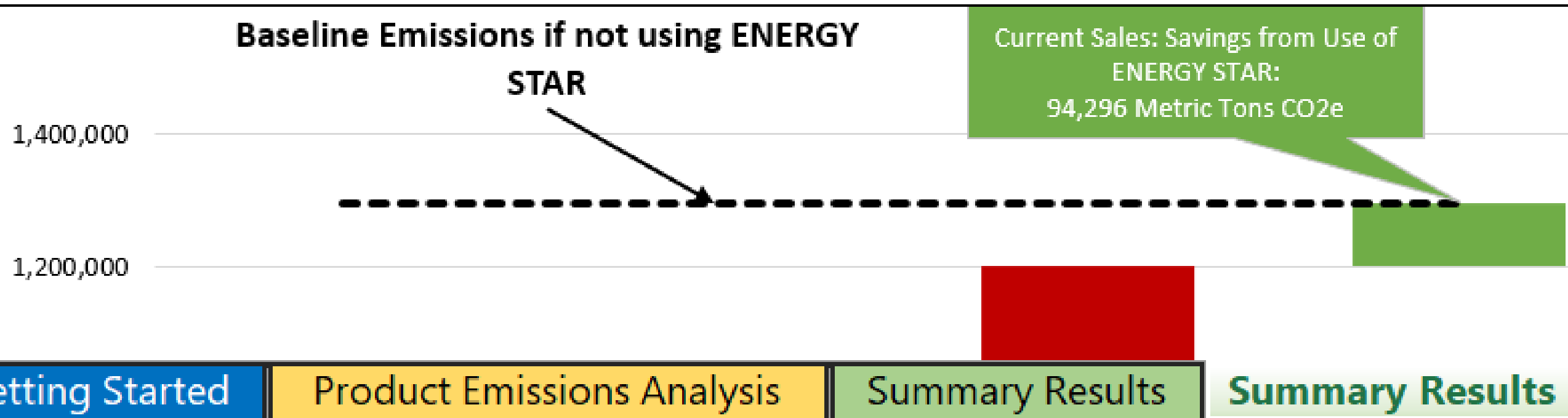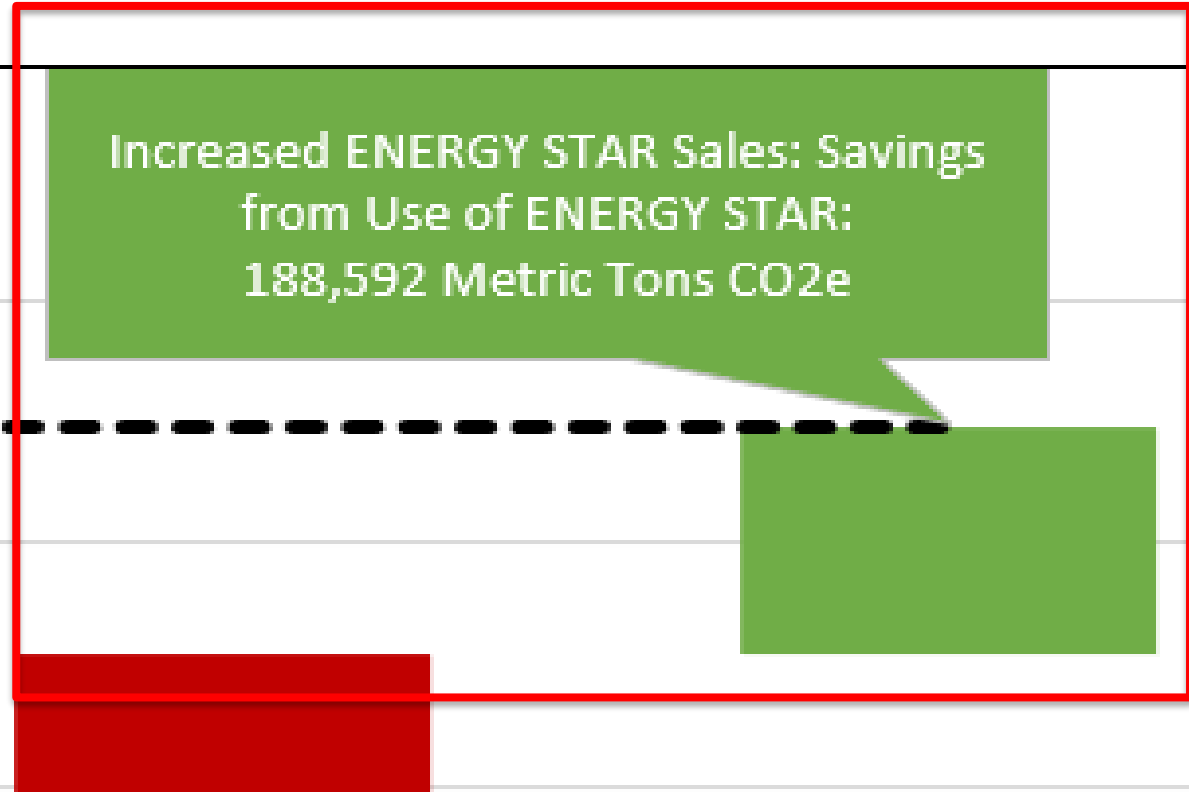
ENERGY STAR Scope 3 Tool Walkthrough – Assumptions & Emission Factors

Major Takeaways

1. If you're new to carbon disclosure, this tool should serve as a nice kickstarter for those efforts.

2. If you aren't new to carbon disclosure, this tool can pinpoint opportunity products (low market share + high efficiency) and standardize baseline vs ENERGY STAR energy consumption.

3. Every retailer that sells products in these 75+ categories should use the assumptions found in this tool. Two identical widgets sold by two different retailers should be counted the same.

4. We'd love your feedback! What new products should we add to ENERGY STAR?

Let's talk about what's possible.™

Best Buy's Scope 3 target: Use of Sold Products

Brynn Albrecht

BEST BUY.

Company overview

More than $47 billion in revenue for fiscal 2021

More than 1,000 stores in the United States and Canada

Approximately 100,000 total employees

BestBuy.com is one of the top retail websites in the U.S.

Domestic online sales were 43% of total domestic revenue in FY21

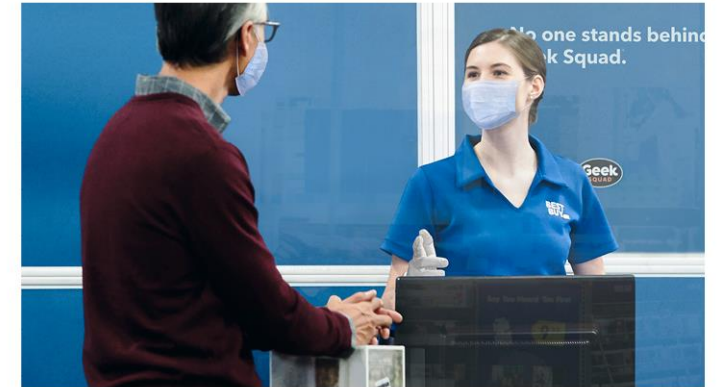In Q4 FY21, almost half of online sales were picked up at stores

FY25 goals

Be one of the best companies to work for in the United States

Double significant customer relationship events to 50 million

Deliver continued top- and bottom-line growth over time

Sustainability & Community goals

Signed The Climate Pledge, a commitment to be carbon neutral by 2040

Reduce customers' carbon footprint 20% by 2030, to save $5B in utility costs
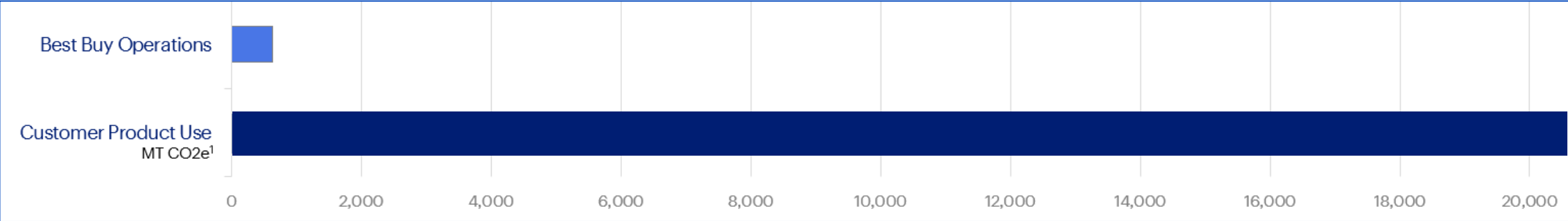
Build a network of 100+ Teen Tech Centers

Setting a Scope 3 target

In 2017, we identified emissions from use of sold products was 40+ times the emissions from our operations.

We set our first Scope 3 target and **committed to reducing emissions from ENERGY STAR products sold at Best Buy 20% by 2030, helping customers save $5 billion in energy costs.**

This goal is certified by the Science Based Targets Initiative (SBTi).

BEST BUY

[1] Measurement is in 000's Metric Tons of Carbon Dioxide Emissions equivalent

Poll: how many ENERGY STAR categories does your company sell?
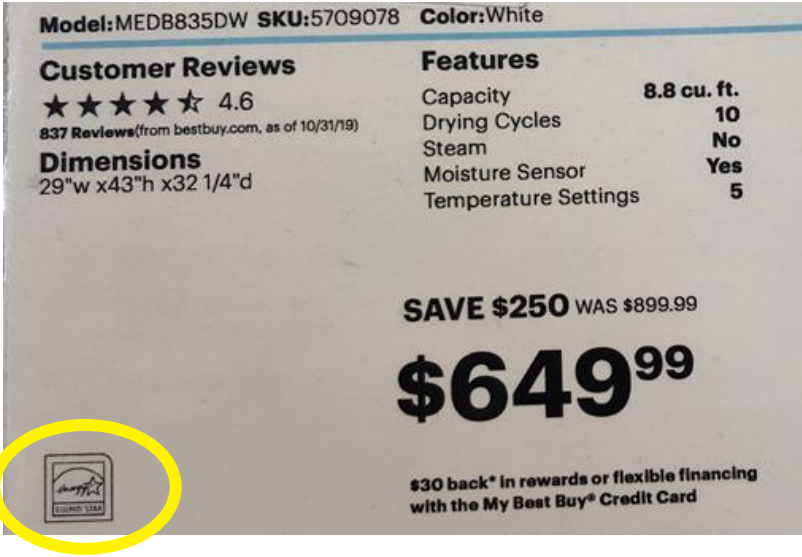
Best Buy and ENERGY STAR

The ENERGY STAR program is the foundation for Best Buy's 2030 Scope 3 target. By selling and promoting ENERGY STAR certified products, Best Buy is committed to helping our customers reduce their carbon emissions.
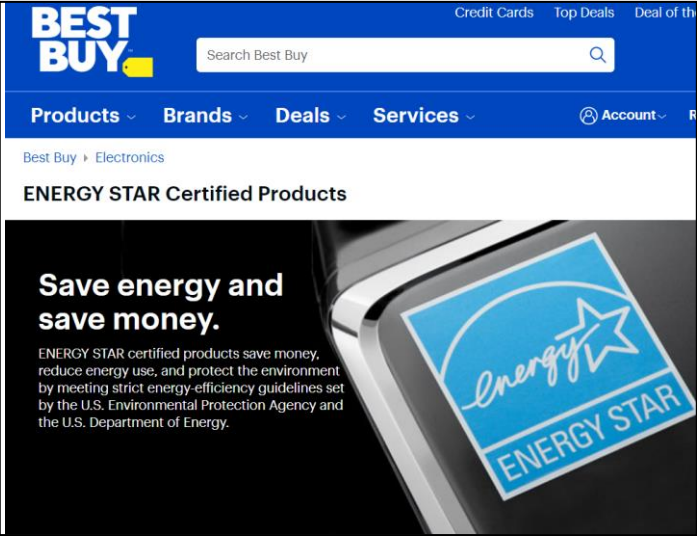
ENERGY STAR landing page

ENERGY STAR facet

ENERGY STAR logo on the fact tag

Best Buy and ENERGY STAR

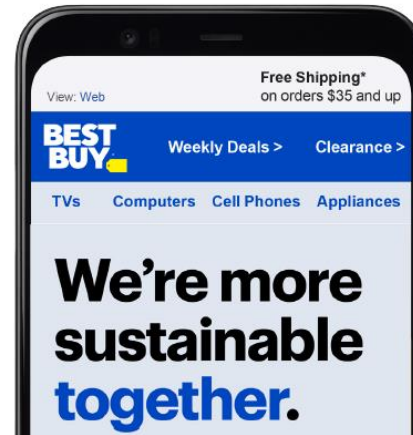**In store videos**

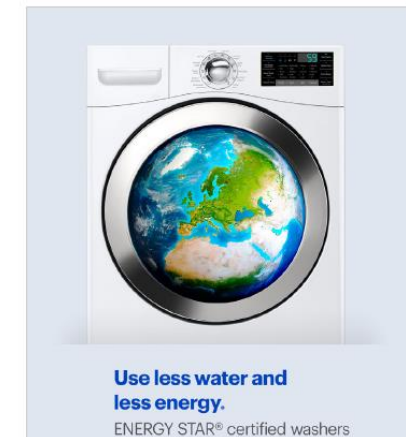**Annual employee training**

Partner of the Year for 8 years

Marketing campaigns

Customer email

Social media

Achieving Scope 3 target

Best Buy will reduce customer use carbon emissions 20% by 2030 from a 2017 base-year.

| Units Sold | ✕ | Energy Use Per Product | ✕ | Electricity Grid "Greenness" | = | Customer Use Carbon Emissions |

Impacts on Carbon Emissions

⬆ Growth in product sales will increase carbon emissions

⬇ Vendors have made product efficiency commitments

⬇ Continued focus on ENERGY STAR market share

⬇ States continue to establish policies in support of clean energy and leading utilities are planning for long-term carbon reductions

Assumptions for Scope 3 target

To calculate carbon and $ savings from selling ENERGY STAR certified products, we use data from the Environmental Protection Agency (EPA).

| Focus Categories	ENERGY STAR Yes - kWh	ENERGY STAR No - kWh	Lifetime in years	Carbon Factor	kwh cost
Air Conditioners	556	611	9	1.55927	0.13
Clothes Dryers	625	778	12	1.55927	0.13
Clothes Washers	467	656	11	1.55927	0.13
Dishwashers	299	340	12	1.55927	0.13
Freezers	281	313	11	1.55927	0.13
Refrigerators	488	538	12	1.55927	0.13
Smart Thermostats	5	10	10	1.55927	0.13
TVs	81	112	5	1.55927	0.13

*2017 data

- **Annual Carbon Savings Pounds** = kWh of ENERGY STAR Yes − kWh of ENERGY STAR No * carbon factor * units sold

- **Lifetime Carbon Savings Pounds** = Annual Carbon Savings Pounds * Lifetime of Product

- **Customer $ savings-Lifetime** =
  (kWh of ENERGY STAR Yes − kWh of ENERGY STAR No) * Units sold of ENERGY STAR yes * kWh cost * Lifetime of Product

Scope 3 ENERGY STAR Tool

The ENERGY STAR calculator is a tool to help validate our Scope 3 emissions data.

ENERGY STAR Scope 3 Use of Sold Products Analysis Tool
v1.0, February 26, 2021
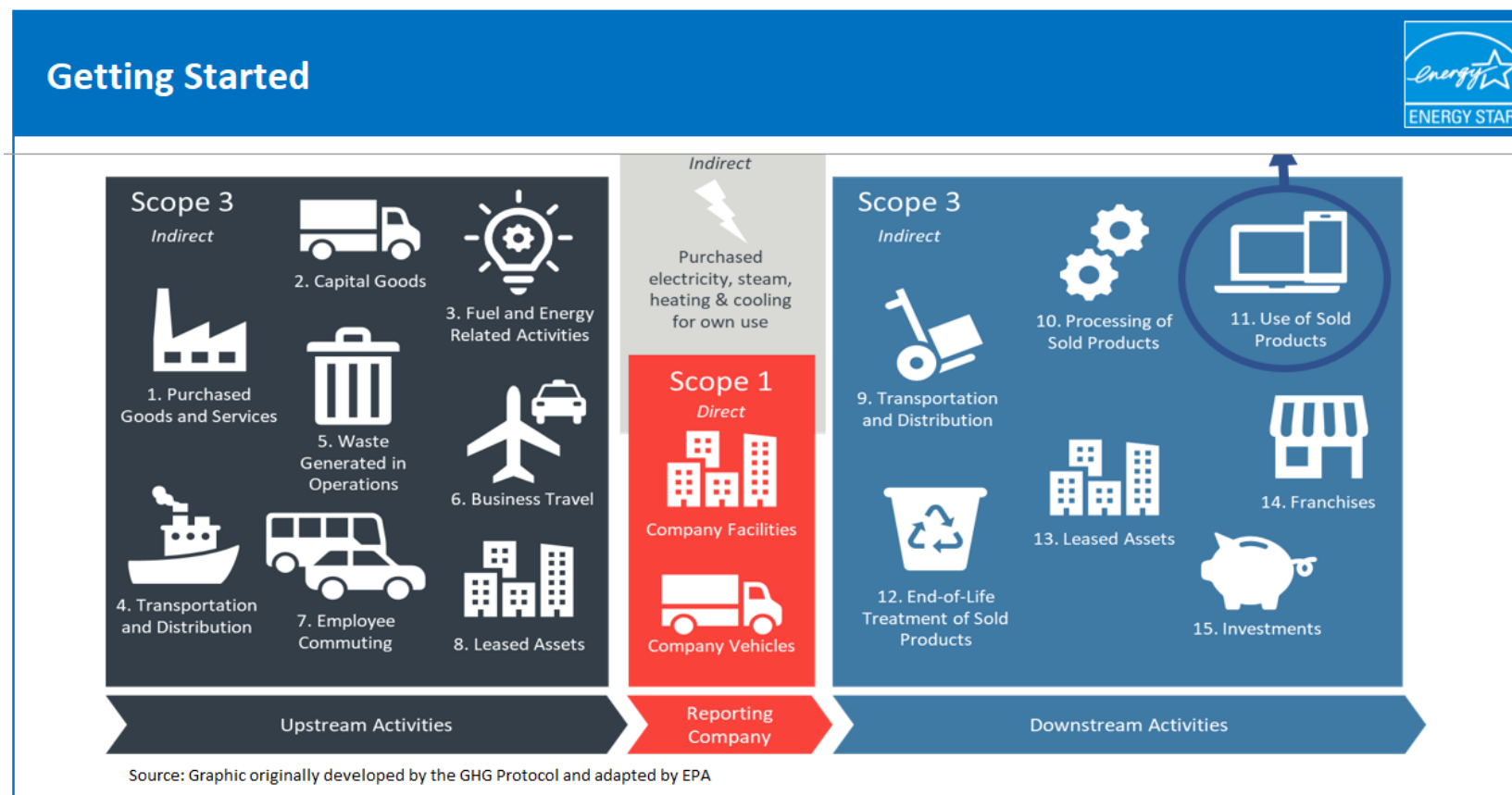
Scope 3 ENERGY STAR Tool

This tool helps us identify energy usage for sub-categories within Best Buy categories, which will help make our data more accurate. The tool will also help to standardize energy consumption data from ENERGY STAR categories, across companies.

| Product Type	Product Lifetime (Years)	Electricity - Unit Energy Consumption (kWh/year)		Fuel - Unit Energy Consumption (MMBtu/year)		Product End Use Emission Factor (kg CO2e/Product Sold)	
Dishwashers - Standard	12	206	181	0.46	0.40	1,362	1,194
Dishwashers - Compact	12	149	136	0.33	0.30	983	897
Refrigerators - Top Freezer	12	401	361	-	-	2,080	1,872
Refrigerators - Bottom Freezer	12	613	560	-	-	3,179	2,904
Refrigerators - Side by Side	12	692	631	-	-	3,589	3,273
Freezers - Chest Freezer	11	239	215	-	-	1,136	1,022
Freezers - Upright Freezer	11	439	395	-	-	2,087	1,878
Clothes Washers - Top Loading	11	414	333	1.00	0.67	2,553	1,975
Clothes Washers - Front Loading	11	425	291	0.61	0.28	2,377	1,547

Thank You.

QUESTIONS?

USE THE Q&A BOX TO SUBMIT YOUR QUESTIONS

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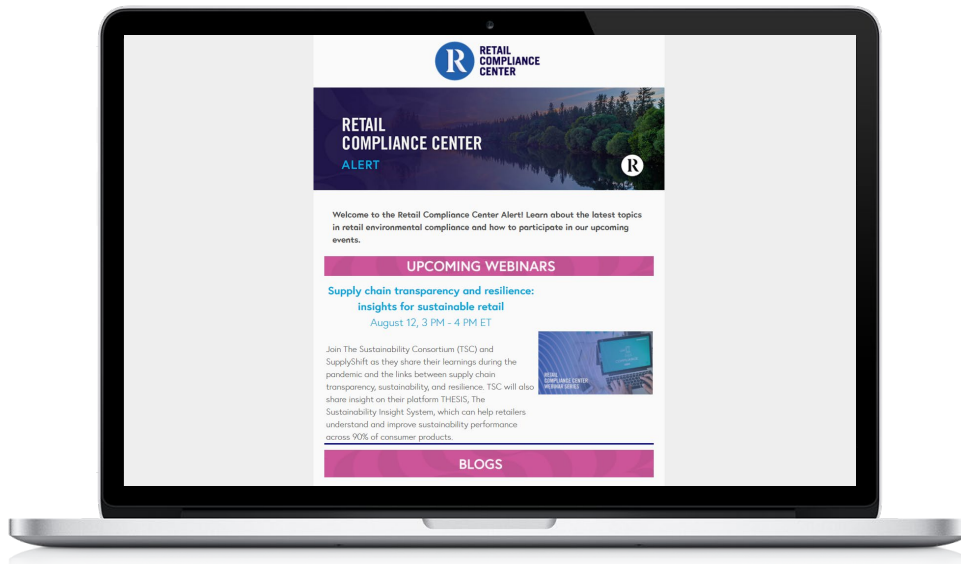
For more information on retail environmental compliance and sustainability, visit the RCC website at https://www.rila.org/retail-compliance-center.

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RETAIL COMPLIANCE CENTER – CONTACT US

THANK YOU