

Checked Out:

How U.S. Supermarkets Fail to Make the Grade in Reducing Food Waste



**The Center for Biological Diversity
The 'Ugly' Fruit and Veg Campaign**

April 2018

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GroceryWaste.com

April 2018

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Table Of Contents

Executive Summary	1
Introduction	3
Report Card Scoring System	6
Effective Food-waste Reduction Policies	9
Case Study: Tesco.....	10
Company Scorecards	13
Ahold Delhaize U.S.....	14
Albertsons Companies.....	17
ALDI U.S.....	20
Costco U.S.....	22
Kroger.....	24
Publix.....	27
Target Stores	29
Trader Joe’s.....	31
Walmart.....	33
Whole Foods Market.....	36
Conclusion	38
Appendix A: Methodology	41
Appendix B: Summary Chart of Company Scores	43
References	44

Executive Summary

Supermarkets have an enormous influence on the food system. That influence extends to the environmental footprint of food waste — from farm to fork. As the primary place where most Americans purchase food, supermarkets influence what makes it from farms to shelves, what happens to unsold food and even how much and what types of food shoppers buy (Escaron, A. 2013).

Food waste has become a critical issue in recent decades. Roughly 40 percent of the food produced in the United States goes uneaten — costing more than \$200 billion each year and creating unnecessary impacts on water supplies, clean air, climate and wildlife (ReFED, 2016).

This report analyzes key food-waste reduction commitments, policies and actions across the top supermarket chains in the United States. Using publicly available information and details provided by company officials, we evaluated and graded 10 companies — Ahold Delhaize, Albertsons, ALDI, Costco, Kroger, Publix, Target, Trader Joe's, Walmart and Whole Foods Market — that operate a combined total of more than 13,000 grocery stores across the country. The analysis was also applied to Tesco U.K. as an example of a major European supermarket that has adopted effective food-waste reduction policies.

Food waste has enormous environmental, social and economic costs. Because of the size and scope of the problem, demand is growing in local, national and international circles to address the issue. Both the United Nations (Sustainabledevelopment.un.org, 2017) and the U.S. Environmental Protection Agency (Environmental Protection Agency, a) have announced goals to halve food waste by 2030.

Our key finding:

Nine out of America's 10 biggest grocery companies fail to publicly report their total food waste. While all of the companies except Whole Foods reported on surplus food donations, that limited data does not indicate the scope of the food-waste problem or what steps the stores are taking to prevent it.

Businesses that serve or sell food are responsible for 40 percent of food waste in the United States, with retailers accounting for more waste than restaurants or food-service providers (ReFED, 2018). Despite the significant role of supermarkets in the food-waste crisis, the industry has taken little meaningful action and made few public commitments to tackle the problem.

Although all the large grocery retailers in the United States have programs to donate surplus food, we found that the sector as a whole is doing very little to prevent food waste from the start. With few exceptions they have failed to take even the first step toward accountability by committing to address food waste and tracking their food waste to understand better how it can be reduced.

For this analysis companies were scored with points given in eight different areas: Corporate Transparency (tracking and publicly reported data), Company Commitments, Supply Chain Initiatives, Produce Initiatives, Shopping Support, Donation Programs, Animal Feed Programs and Recycling Programs. (See Methodology for a detailed breakdown of the scoring system.)

Based on publicly available information and details provided by the companies upon our request, this report found the following:

- Nine out of America’s 10 largest grocery companies fail to publicly report their total volume of food waste. Ahold Delhaize was the only company that publicly reported its total food-waste volume.
- The four companies that earned a C grade or higher were the only ones with specific food-waste reduction commitments. Kroger leads the way with a commitment of zero food waste by 2025.
- Four of the 10 companies have no imperfect-produce initiatives, which can prevent the waste of imperfect fruits and vegetables.
- Walmart was the only company with a variety of clear in-store efforts to reduce food waste, such as improving store fixtures, standardizing date labels and educating associates and shoppers.
- All of the companies have food-donation programs, with the majority operating company-wide. ALDI was the only company that did not report a food-recycling program (e.g. composting, animal feed or other industrial uses).

Rank	Company	Grade
1	 Walmart	B
2	 Ahold Delhaize U.S.	C
3	 Kroger	C
4	 Albertsons Companies	C
5	 Target Stores	D
6	 Trader Joe's	D
7	 Whole Foods Market	D
8	 Costco U.S.	D
9	 Publix	D
10	 ALDI U.S.	F

Recommendation: To help meet national and international food-waste reduction goals, corporate sustainability targets, and to do their part to reduce wasted food, we call on U.S. supermarkets to commit to eliminating food waste by 2025. To meet that goal, they must take concrete steps to reduce food waste in their supply chains and their stores and provide transparent public reporting on their progress as outlined in this report.

Eliminating food waste in the grocery sector could have a ripple effect across society that could help address hunger, save money, conserve water and land, create more efficient agricultural systems, reduce greenhouse gas emissions and protect endangered species. Customers have taken notice of the massive problem of wasted food in the United States and want responsible businesses to take action.

Introduction

An estimated 40 percent of the food produced in the United States is wasted every year, totaling about 62.5 million tons and costing households, businesses and farms about \$218 billion annually (Natural Resources Defense Council 2012, ReFED 2016). Also wasted were the resources that went into producing that food, including 25 percent of all fresh water consumed, 13 percent of the total carbon emissions and 80 million acres of farmland used in the United States (Environmental Protection Agency 2014; Hall, K.D. et al 2009; ReFED, 2016).

Uneaten food is the single largest source of trash in municipal landfills, attracting wildlife and providing an unnatural and often toxic food source (USDA Food Challenge FAQs 2017). Landfills are the third largest source of methane produced in the country (Environmental Protection Agency, 2017). Methane is a greenhouse gas that is approximately 87 times more potent at warming the planet than carbon dioxide over a 20-year period. In addition to contributing to climate change, pollution and land degradation, wasting food wastes natural resources that native and endangered wildlife need to survive.

Food waste worsens the unsustainability of industrial food production, which imperils wildlife and puts food security at risk. And it's a growing problem: The amount of food wasted in the United States has tripled over the past 50 years (Ferdman, R. 2014). Meanwhile 1 in 7 Americans suffer from food insecurity — a problem that cannot be addressed solely through donation programs (Coleman-Jensen et al., 2017). It is only by preventing food waste from the start that we can begin to address the environmental footprint and inequalities of our food system.

In the United States, people spend more than \$650 billion at supermarkets annually (figures from the Food Marketing Institute and U.S. Bureau of Labor Statistics). That spending gives the sector enormous influence on personal budgets and the economy, as well as on the food system.



From strict cosmetic standards in company policies that result in edible produce left in the field to overstocked displays that result in over-purchasing and spoilage, supermarkets are responsible for food waste at every stage of production and grocery retail sale, generating 8 million tons of food waste each year (ReFED, 2018).

The most effective way to maximize the social, economic and environmental benefits of addressing food waste is to prevent the waste to begin with (Environmental Protection Agency (2017-e). While donation and recycling programs have some advantages over sending food directly to the landfill, they don't address the emissions, land, water, pesticides and other threats to wildlife that result from producing uneaten food. Preventing food waste holds two to seven times the lifecycle greenhouse gas benefit per ton compared to recycling food (ReFED, 2016).

At the grocery retail level, policies from supply-chain commitments to shopper education can aid in food-waste prevention. But to fully understand the scope of the problem and effectively implement food-waste reduction strategies, retailers must track how much food is being wasted throughout their operations.

Without transparent tracking and reporting of the amount of food waste across their companies, there is no starting point from which to measure the effectiveness of food-waste programs, nor any way for them to be held accountable to customers, investors or their own goals. This fundamental first step of corporate transparency — including specific, time-bound commitments to food-waste reduction and public reporting on progress — is virtually nonexistent among U.S. supermarkets.

Supermarket policies influence supply chains as well as customer habits, and function as a gatekeeper to food purchasing (Davies, T. 2000; Smith, B. G. 2008). Improved in-store policies such as standardizing date labeling, keeping edible food on the shelves longer and eliminating buy-one-get-one-free sales and other promotions that encourage over-purchasing can help prevent food waste in stores and homes.

Easing cosmetic standards and purchasing whole and seasonal crops can reduce the massive amount (estimated at 20 billion pounds) of edible produce left to rot in the fields. Supply-side commitments to reducing “bycatch” (non-targeted fish and other animals caught or killed by fishing gear) can take a massive bite out of seafood waste in the supply chain as well as educate consumers about the ecological costs of eating ocean wildlife (Monterey Bay Aquarium Seafood Watch (1999-2018).

Unfortunately few U.S. supermarkets have implemented these strategies, despite their potential for saving money and reducing food waste. In all of these areas, some major European supermarkets have already demonstrated the feasibility and benefits of these food-waste prevention policies (see Tesco, U.K. case study below). In the case of an international company like ALDI, companies may have stores in the United States that have not adopted the same practices as their European stores.

In early 2018 ReFED released a Retail Food Waste Action Guide in partnership with the Food Waste Reduction Alliance. The guide provides an overview of the enormous opportunity in the retail sector to address food waste, along with valuable information on a variety of solutions to help retailers prioritize waste reduction initiatives. ReFED’s guide emphasizes the economic benefits of different solutions.



Food Recovery Hierarchy courtesy of the Environmental Protection Agency. Retrieved from: <https://www.epa.gov/sustainable-management-food/food-recovery-hierarchy>

The public-facing side of fighting retail food waste, including transparency and accountability, is prioritized in this report, along with policies that focus on preventing food-waste, increasing sustainability and engaging customers and investors to help the U.S. supermarket industry catch up with the global food waste movement.

This report compares American grocery retailers for supply-side and in-store food-waste reduction strategies as well as time-based commitments to food-waste reduction initiatives, tracking and transparency. It analyzes retailers with the most U.S. stores — Ahold Delhaize, Albertsons, ALDI, Costco, Kroger, Publix, Target, Trader Joe’s, Walmart and Whole Foods — alongside a case study of Tesco, U.K., a European model that has implemented a number of types of effective food-waste reduction strategies that U.S. stores could mirror.

This comparison will help create a benchmark to identify leaders and progress, as well as companies that continue to fall behind as the retail food industry addresses its role in the food-waste crisis.

Report Card Scoring System

Accountability (19 points possible)

Corporate Transparency

For public reporting (data on food waste measured in weight, accessible via corporate websites or sustainability reports with the exception of store or division level tracking), companies earned (up to 14 points):

- 4 points for total food-related landfill/incineration data from all stores and operations; or
 - 3 points for data from all stores or production; or
 - 2 points for data from some stores.
- 2 points for a program or pilot program to track data at the store or division level to target waste-reduction efforts, with results reported internally.
- 2 points for any supply-chain prevention data (“ugly” produce and other measures).
- 2 points for any seafood-bycatch waste data.
- 2 points for food-donation data from all stores; or
 - 1 point for partial food-donation data.
- 2 points for animal feed and/or recycling (compost/AD) data from all stores; or
 - 1 point for partial animal feed and/or recycling (compost/AD data).

Company Commitments

Companies earned (up to 5 points):

- 4 points for a commitment to zero food waste by 2025; or
 - 3 points for a zero-waste commitment later than 2025; or
 - 2 points for a time-bound, specific commitment less ambitious than zero waste by 2025 or that is time-bound or specific, but not both; or
 - 1 point for a commitment that's not company-wide or not specific or time bound.
- 1 point for public support of national or international food-waste reduction targets.

Prevention (20 points possible)

Supply Chain Initiatives

Companies earned (up to 8 points):

- 2 points for a comprehensive program that purchases whole crops from multiple suppliers; or
 - 1 point for a pilot or single-product program that purchases whole crops.
- 2 points for any program that works to reduce or eliminate seafood-bycatch waste.
- 1 point for any program that includes commitment to purchasing seasonal/bumper crops.
- 1 point for any program that encourages whole-crop utilization from suppliers.
- 1 point for studying and addressing farm-level loss and how retailers and suppliers can work together to reduce it.
- 1 point for other supply-chain food-waste prevention program not described above.

Produce Initiatives

Companies earned (up to 5 points):

- 3 points for selling “ugly” or “second- or third-grade” produce whole in all stores; or
 - 2 points for an established program selling “ugly” or lower-grade produce in some stores; or
 - 1 point for piloting “ugly” or lower-grade produce in some stores.
- 1 point for using “ugly” produce in prepared or pre-cut foods in all or some stores.
- 1 point for repurposing in-store produce that was on shelves and pulled back for cosmetic reasons and put into meals/pre-cut items in all or some stores.

Shopping Support

Companies earned (up to 7 points):

- 2 points for any stocking, display or packaging initiatives to reduce wasted food and over-purchasing in all stores; or
 - 1 points for doing so in some stores, but not company-wide.
- 2 points for standardized date label initiatives across all store-brand products, at all stores; or
 - 1 point for standardized date labels on some store-brand products or not company-wide.
- 2 points for eliminating buy-one-get-one free offers.
- 1 point for initiatives to educate and engage employees or shoppers on household food-waste reduction.

Recovery and Recycling (11 points possible)

Donation Programs

Companies earned (up to 6 points):

- 3 points for a surplus-food donation program active across all company stores; or
 - 2 points for any surplus-food donation program that is not company-wide.
- 2 points for including produce, dairy and/or meat in surplus-food donations in all stores; or
 - 1 point for including produce, dairy and/or meat in surplus-food donations, but not company-wide.
- 1 point for public policy advocacy and funding to assist food banks and communities in reducing food waste and fighting hunger.

Animal Feed Programs

Companies earned (up to 3 points):

- 3 points for an animal-feed recycling program at all stores, where facilities are available; or
 - 2 points for at least one program that does so, but not company-wide.

Food Recycling Programs

Companies earned (up to 2 points):

- 2 points for any program that diverts surplus food, food scraps and fluids from landfills for recycling (composting), anaerobic digestion or industrial uses at all stores, where facilities are available; or
 - 1 point for any program that does so, but not company-wide.

Total Scoring

Companies may earn a total score of up to 50 points and were graded as follows:

- A = 40 to 50 points
- B = 30 to 39 points
- C = 20 to 29 points
- D = 10 to 19 points
- F = 0 to 9 points

** Note: See Appendix A for full explanation of methodology.*

Effective Food-waste Reduction Policies

To be effective in tackling food waste, grocery retail-level policies must be systemic, transparent and integrate reduction strategies — from addressing waste in the supply chain to educating customers on minimizing household food waste.

1. The first step is to make time-based commitments to address food waste with the goal of zero surplus food.
2. Second, companies should track and publicly report the total amount of food wasted and the impact of their reduction efforts across their stores.

Other food-waste reduction strategies include:

- corporate policies to reduce supply chain waste, such as committing to whole-crop purchasing and selling ugly produce;
- sustainable seafood policies to eliminate bycatch;
- policies that promote quicker, fresher, longer-lasting food transport, packing and delivery;
- utilizing emerging technology that helps monitor temperatures and conditions of perishable foods with real-time analytics (Farrell, J. 2017);
- online and in-store initiatives to reduce over-purchasing, such as eliminating buy-one-get-one-free models and offering meal-planning tools (Natural Resources Defense Council, 2017; Tesco, 2016-b).

Case Study: Tesco

Summary

Tesco has emerged as a global leader in reducing food waste in the grocery retail sector. It was a founding signatory of the Courtauld 2025 Commitment, a 10-year, voluntary agreement to make the U.K. grocery sector more sustainable. The commitment includes a 20 percent reduction in food and drink waste, a 20 percent reduction in greenhouse gases from food and drink packaging and a reduction in water waste. However, Tesco's own commitment to eliminate food waste is significantly more ambitious, as are the scope of its programs to not only address food waste throughout its supply chain and operations, but to track and report on its progress. The company reports food waste at less than 1 percent for 50 million shoppers.

Although a small amount of food goes to incineration when no recycling options are available, no food from Tesco has gone to landfill since 2009. What truly makes Tesco a model in supermarket food-waste reduction, however, is its emphasis on prevention and partnerships. From working with suppliers to purchase whole crops to shopper education tools and programs to help customers reduce waste from the store to their kitchens, Tesco has established itself as a leader in the food-waste reduction movement.

U.S. retailers should adopt Tesco's model practices of comprehensive food-waste reduction initiatives and transparent, public reporting.

Analysis

Accountability (19 points possible)

Corporate Transparency

- Reported in-store food waste at less than 1 percent for 50 million shoppers a week (a total of 60,000 metric tons for the year). Piloted the international "Food Loss and Waste Accounting and Reporting Standard," which was recently launched in partnership with global government and industry groups and aims to provide consistency in measuring food waste and reporting requirements. (4 Points)
- As of 2017 reported 68 million portions of "Perfectly Imperfect" fruits and vegetables sold (2 points)

FOOD WASTE SCORECARD



Number of stores around the world (approximate): 7,000

POLICY	POINTS
Corporate Transparency	10 / 14
Company Commitments	5 / 5
Supply Chain Initiatives	8 / 8
Produce Initiatives	4 / 5
Shopping Support	7 / 7
Donation Programs	6 / 6
Animal Feeding Programs	3 / 3
Food Recycling Programs	2 / 2
TOTAL SCORE	45 / 50

- Reported donations of 4.5 percent of its surplus food in 2017. (2 Points)
- In total sold 9,957,374 metric tons of food to customers through UK operations. This generated: 71,178 metric tons of surplus (not sold to customers), 38,696 metric tons fit for human consumption, 22,305 metric tons donated or redistributed for animal feed. Only 16,391 metric tons of food fit for human consumption went to Energy Recovery. (2 Points)

Company Commitments

- In 2016 committed to zero surplus food wasted by the end of 2017 for U.K. operations. The goal has been amended to March 2018. (4 points)
- Committed to globally adopt and endorse U.N. Sustainable Development Target 12.3, which aims to halve global food waste at the retail and consumer levels, reduce food waste along the production and supply chain by 2030 and publish food-waste data. Also made a joint commitment to adopt SDG Target 12.3 with 25 of the largest Tesco Product Partners (responsible for 18 billion pounds worth of annual sales), publish food-waste data in supplier operations within 12 months and act in partnership to reduce food waste farm to fork. (1 point)

Prevention (20 points possible)

Supply Chain Initiatives

- The flexible produce standards of the “Perfectly Imperfect” campaign offers enables the company to purchase 95 percent of its suppliers’ strawberries and 97 percent of British apple growers’ crops. Tesco aims to include more products and be cognizant of seasonal produce in this line and intends to establish juicing relationships with processors that would utilize the rest of the apple crops. (Hammond, K. 2015). (2 points)
- Instituted a seafood policy with a goal of 100 percent sustainably sourced seafood working in partnership with the Marine Stewardship Council (MSC) and Sustainable Fisheries Partnership to collect data on fisheries and work with suppliers to improve practices. Many of its source fisheries are already certified as independently certified to the Marine Stewardship Council (MSC) standard, while others are working towards this goal, often through Fishery Improvement Projects (FIPs), which work to reduce bycatch. (2 Points)
- Purchases “bumper crops” and passes savings on to customers to reduce supply-side food waste from unseasonably good growing conditions. (1 Point)
- Shares forecasts with suppliers (via the Tesco Connect Forecasting system) to help them plan their crops and aims to work with suppliers when orders differ significantly from the forecast, including not cancelling orders last minute, accepting the full order and its waste impact, accepting some of the additional volume and supporting supplier in finding ways to use the rest. (1 Point)
- Studies farm-level loss through agricultural hubs in Europe, South America and Africa staffed by trained agronomists. It has invested in advanced forecasting and ordering systems to work with suppliers on waste reduction and has an online “food waste hotline” to assist suppliers and growers in tracking and tackling food-waste issues (Silverstein, 2017). (1 Point)
- Partnered with bean growers in Kenya to loosen requirements for bean-trimming, meaning on average 15 percent of the bean will no longer go to waste. Tesco aims to reduce food waste by 148.8 tons per year through these partnerships. Made a cut to the packing phase of Spanish-imported produce to add several days shelf-life to lettuce, cucumbers, peppers, celery, broccoli and oranges. (1 Point)

Produce Initiatives

- “Perfectly Imperfect” range allows more flexibility for produce standards, starting by offering “wonky” parsnips, potatoes, strawberries and apples at a discount, with a goal of expanding the line to other products. (3 Points)
- Uses “ugly” produce in prepared or pre-cut foods. (1 Point)

Shopping Support

- Packaging improvements, such as “skin packaging” on beef and lamb products, allow up to an additional five days of freshness and easily allow customers to eat one item while keeping the other portions wrapped for freshness. (2 Points)
- Removed ‘Display Until’ date labels and moved to a single date code (either ‘Best Before’ or ‘Use By’) across fresh produce, meat and dairy. Also updated freezing advice to highlight products can be frozen up to their expiration date. (2 Points)
- Eliminated “buy one get one free” promotions on fruits and vegetables. (2 Points)
- Tesco’s Leftover Tool helps customers connect ingredients with recipes for leftover foods from scraps. Worked with WRAP (Waste & Resources Action Programme) to create a Love Food, Hate Waste section on its Real Food website and includes tips from the project on Perfectly Imperfect produce and Tesco.com produce bags. (1 point)

Recovery and Recycling (11 points possible)

Donation Programs

- Works with Community Food Connection to donate surplus food through all of its 2,654 stores and through its top 20 suppliers. Stores use the FoodCloud app to let local charities and community groups know how much surplus food they expect to have for donation at the end of the day. (3 Points)
- Donation program includes produce, dairy and/or meat in all stores. (2 Points)
- Raises funding to support FareShare. (1 Point)

Animal Feed Programs

- Bakery surplus that cannot be donated is made into animal feed for livestock. (3 points)

Food Recycling Programs

- Chicken fat and cooking oil are converted into bio-diesel. Where all other options are not available, energy is recovered from food waste through anaerobic digestion. Some stores do not have these options for recycling, so food waste is sent to incineration. (2 points)

Total Score for Tesco: 45 Points

Data and information from email correspondence with company representatives and public materials at: <https://www.tescopl.com>

Company Scorecards

Ahold Delhaize U.S.

Summary

Ahold Delhaize is a global company that has made a strong commitment to zero food waste across its operations. The company touts the United States as its biggest market segment, but it is difficult to obtain information specifically about food-waste reduction efforts and data in its U.S. operations. However, the company seems to have a thorough internal tracking system for its major banners and has acknowledged the benefit of tracking its food waste in meeting reduction goals.

The company’s Moving to Zero Waste program seems to be primarily focused on donation and recycling. However, its 2016 sustainability report pledges to work with suppliers to reduce food waste upstream, as well as work to help customers reduce household food waste. Expanding initiatives to prevent food waste from farm to fork are crucial to addressing the food-waste crisis, and there are plenty of opportunities for the company to do so. For example, Ahold Delhaize’s Dutch chain, Albert Heijn, has a campaign to help shoppers better understand food storage, which could be exported to its U.S. stores, and the online grocery service Peapod provides an excellent opportunity to provide web-based tools for customers as they shop. On the supply chain side, the company should expand its “misfits” imperfect produce program and work with suppliers to purchase whole crops.

FOOD WASTE SCORECARD



AHOLD DELHAIZE U.S.

Number of U.S. Stores (approximate): 2,000
 Locations: 23 states
 Top Banners: Food Lion, Stop & Shop, Hannaford, Giant, Peapod (8 banners total)



POLICY	POINTS
Corporate Transparency	11 / 14
Company Commitments	5 / 5
Supply Chain Initiatives	3 / 8
Produce Initiatives	1 / 5
Shopping Support	1 / 7
Donation Programs	2 / 6
Animal Feeding Programs	2 / 3
Food Recycling Programs	1 / 2
TOTAL SCORE	26 / 50

Analysis

Accountability (19 points possible)

Corporate Transparency

- Reported 5.02 metric tons of food waste globally per million euros for 2016 (U.S. data not specified). (4 points)
- Food Loss and Waste Inventory for Hannaford and Food Lion stores and distribution centers tracks food waste at store level. (2 points)
- Working to track seafood “from ship to plate,” starting with own-brand products. (2 points)
- Reported over 20 million pounds of food donated by Hannaford for hunger relief in 2015. (1 point)
- Reported 72 percent of food waste recycled globally in 2016, which includes animal feed, biogas generation, compost and rendering. That same year the Green Energy facility for Stop & Shop New England processed more than 40 million pounds of inedible food to create 4,442 (MW) of electricity. (2 points)

Company Commitments

- “Moving to Zero Waste” program has goal to achieve zero food waste by donating or recycling 90 percent of its total food waste in addition to a goal to reduce its total food waste per food sales by 20 percent by 2020. (4 points)
- Inaugural member of the EPA’s 2030 Food Loss and Waste Champions and supports the United Nations’ Sustainable Development Goal to cut food waste in half by 2030. (1 point)

Prevention (20 points possible)

Supply Chain Initiatives

- Sustainable seafood program uses several certifications and criteria to offer more responsible seafood options globally, including determining Food and Agriculture Organization catch area and method for wild fish. (2 points)
- Hannaford uses Computer Assisted Ordering and daily fresh product deliveries to better manage inventory. (1 point)

Produce Initiatives

- Hannaford chain sold “misfits” imperfect produce in some stores. (1 point)

Shopping Support

- In-store programs to help employees improve food-waste tracking and sorting and better understand the importance of diverting food waste from landfills. (1 point)

Recovery and Recycling (11 points possible)

Donation Programs

- Hannaford is a leadership partner with Feeding America. Moving to Zero Waste program expected to be implemented in all Food Lion stores by the end of 2018. (2 points)

Animal Feed Programs

- Moving to Zero Waste program includes diversions to animal feed operations. (Information on whether this is implemented across all banners and stores was unavailable.) (2 points)

Food Recycling Programs

- Moving to Zero Waste program includes diversions to composters or anaerobic digesters. (Information on whether this is implemented across all banners and stores was unavailable.) (1 point)

Ahold Delhaize U.S. Total Score: 26 Points

Data from Supplementary report on Sustainable Retailing performance 2016, Food Loss and Waste Protocol case study (Delhaize America's Operations in the United States: Food Waste in Stores and Distribution Centers) and website at: <https://www.aholddelhaize.com/en/sustainable-retailing/sustainable-retailing-in-practice/reduce-food-waste/>. Company representatives declined to provide additional information.

Albertsons Companies

Summary

Albertsons has several established programs to address food waste, such as Fresh Rescue and Fresh Cuts, and the Just-4-U app that helps shoppers plan their purchases. Despite these steps in the right direction, Albertsons does not provide publicly available, quantified data about its wasted food. Although it has publicly committed to cut food waste in half by 2030 it has not committed to eliminate food waste across all operations by 2025.

The company must adopt greater transparency about the amount of food waste generated and the effectiveness of its programs to prevent and divert food waste. Along with measurable commitments with baselines and goals, this increased transparency would help customers and

investors to feel confident that the company is dedicated to addressing the food-waste crisis. In addition, Albertsons should increase supply-chain activities to further reduce wasted food before it reaches the shelves.



Analysis

Accountability (19 points possible)

Corporate Transparency

- Landfill and organic waste from stores is hauled to distribution centers where data is aggregated at a division level. (2 points)
- Reported 80,000,000 pounds of food donated through Fresh Rescue program in 2016. (2 points)

Company Commitments

- Committed to zero waste (including food waste) at manufacturing facilities by 2022. In 2016, 11 of 18 manufacturing facilities were zero waste, having achieved over 90 percent diversion from landfill. (2 points)
- Supports the commitment of the EPA and the USDA to reduce food waste by 50 percent by 2030. (1 point)

Prevention (20 points possible)

Supply Chain Initiatives

- Responsible Seafood Program includes a policy and commitment aimed at ensuring seafood is sourced from sustainable, traceable and socially responsible sources. Purchase order data is used to monitor and measure progress towards responsible seafood commitments. Works with seafood suppliers to source seafood products in line with the Responsible Seafood Policy. (2 points)
 - Responsible Seafood Policy utilizes the Monterey Bay Aquarium's Seafood Watch ranking system and certification schemes, both of which account for bycatch, prioritizing products that are rated "Best choice" or Good Alternative." Its Open Nature Shelf-Stable Tuna uses Albacore and Skipjack tuna caught by pole-and-line, a fishing method with minimal bycatch.
 - Committed to responsibly sourcing 100 percent of its top 20 fresh and private-label frozen-seafood products by 2022. 56 percent of its top 20 fresh and frozen products (by volume) met its Responsible Sourcing Policy in 2017.
- Has worked with Food Marketing Institute, ReFED, Divert and others to identify opportunities to address food waste issues. (1 point)

Produce Initiatives

- Fresh Cut program uses produce in pre-cut items that might otherwise be discarded as ugly produce. Company reports that "OWN Brands private-label products incorporate a large amount of less-than-perfect fruits and vegetables from farms/suppliers in packaged and canned goods such as soups, sauces, juices etc. as well as in Fresh Cut prepared foods program." (1 point)
- Fresh Cut program includes repurposing produce that has been pulled from shelves for cosmetic reasons. (1 point)

Shopping Support

- Markdown sales rack with dynamic pricing for products close to expiration date. (2 points)
- Worked with the Food Marketing Institute and the Grocery Manufacturers Association as part of an industry-wide initiative to standardize product date labeling and wording on packaging about quality and safety of products. Plans to phase in the voluntary standard to ensure consistency across product categories. (1 point)
- Periodically promotes food-waste prevention methods on social media and blogs. For example, 2017 Earth Day blog discussed meal planning, proper food storage and date labeling. Provides customers with meal-planning tools such as the Just-4-U app and online recipes to help reduce over-purchasing, and offers meal kits through Plated. (1 point)

Recovery and Recycling (11 points possible)

Donation Programs

- Fresh Rescue food-donation program operates within all divisions (but not all stores). (2 points)
- Donation program includes produce, dairy and/or meat. (1 point)

Animal Feed Programs

- Many stores incorporate animal-feeding programs where feasible. Culinary center regularly donates meat to feed animals in local zoos. Manufacturing also donates excess food to animals. (2 points)

Food Recycling Programs

- Many stores incorporate composting where feasible. Manufacturing facilities have programs in place to divert unsaleable food and organic material from landfills to composting. (1 point)

Albertsons Total Score: 22 Points

Data and information from email correspondence with company representative and Albertsons' website and Sustainability Report for 2016 and other public materials at https://www.albertsons.com/wp-content/uploads/2017/10/Albertsons_Companies_Sustainability_Update_2016.pdf.

ALDI U.S.

Summary

Although ALDI UK has a number of commitments and programs in place to reduce food waste, its U.S. counterpart has few known initiatives and did not provide any additional data. For example, ALDI has joined the Champions 12.3 coalition (see Tesco case study in this report) to cut food waste in the U.K. and Ireland by 50 percent over the next 12 years. Yet in the U.S. they have made no such commitment. ALDI U.S. does have a strong food-donation program that operates across all stores, donating a significant 17 million pounds of food in 2016.

ALDI US should import its international commitment to food-waste reduction, with a focus on food-waste prevention in-store and up the supply chain, as well as implementing transparent tracking and reporting across its stores to monitor progress toward zero food waste by 2025.

FOOD WASTE SCORECARD



ALDI
U.S. **F**

U.S. Stores (approximate): 1,700

Locations: 35 states

POLICY	POINTS
Corporate Transparency	2 / 14
Company Commitments	0 / 5
Supply Chain Initiatives	2 / 8
Produce Initiatives	0 / 5
Shopping Support	0 / 7
Donation Programs	3 / 6
Animal Feeding Programs	0 / 3
Food Recycling Programs	0 / 2
TOTAL SCORE	7 / 50

Analysis

Accountability (19 points possible)

Corporate Transparency

- Companywide program reported donating 17 million pounds of surplus food in 2016. (2 points)

Company Commitments

- None identified.

Prevention (20 points possible)

Supply Chain Initiatives

- Seafood Policy includes reducing bycatch. Partners with the Sustainable Fisheries Partnership. (2 points)

Produce Initiatives

- None identified.

Shopping Support

- None identified.

Recovery and Recycling (11 points possible)

Donation Programs

- Companywide program donates surplus food from all stores. (3 points)

Animal Feed Programs

- None identified.

Food Recycling Programs

- None identified.

ALDI U.S. Total Score: 7 Points

Data from <https://corporate.aldi.us/en/corporate-responsibility/environment/>. Email correspondence with company did not result in any additional information.

Costco U.S.

Summary

Costco recently updated its sustainability commitment online but offers little information beyond donations and recycling regarding food-waste reduction efforts. The updated commitment does not feature any company goals, data or prevention initiatives.

Costco must commit to eliminating food waste across its operations by 2025 to show its customers and employees that it is serious about reducing wasted food. To achieve this the company must increase initiatives up the supply chain as well as track and publicly report on food waste both in the supply chain and in its stores to identify how it can best utilize its warehouse model and influence in the sector to prevent wasted food.

FOOD WASTE SCORECARD



COSTCO U.S.

D

Number of U.S. Stores (approximate): 500
Locations: 44 states and Puerto Rico
Top Banners: Costco

POLICY	POINTS
Corporate Transparency	3 / 14
Company Commitments	0 / 5
Supply Chain Initiatives	2 / 8
Produce Initiatives	0 / 5
Shopping Support	2 / 7
Donation Programs	3 / 6
Animal Feeding Programs	2 / 3
Food Recycling Programs	2 / 2
TOTAL SCORE	14 / 50

Analysis

Accountability (19 points possible)

Corporate Transparency

- Donated more than 8.5 million pounds of food to food-redistribution organizations. (2 points)
- Reported that the animal-feeding program converted 4.8 million pounds of organic waste into animal feed for cattle and hogs in fiscal year 2017. The company recycled more than 6.5 million pounds of chicken grease (most of which was converted into biofuel) and converted 950,000 pounds of organic waste into certified organic liquid fertilizer that was purchased by some of the company's produce suppliers. 52 U.S. locations send all trash to a waste-to-energy facility, which represents 50.5 million pounds total waste diverted from landfills (data for food or organic matter was not specified). (1 point)

Company Commitments

- None identified.

Prevention (20 points possible)

Supply Chain Initiatives

- Some major company suppliers are participants in the International Seafood Sustainability Foundation, which works on reducing bycatch. Company also has a sustainable seafood policy. (2 points)

Produce Initiatives

- None identified.

Shopping Support

- Many bakery items upgraded to recyclable PET packaging, providing customers with better storage after purchasing that may reduce food waste by extending the life of the product. (2 points)

Recovery and Recycling (11 points possible)

Donation Programs

- Company-wide food-donation program donated more than 8.5 million pounds of food in fiscal year 2017. (3 points)

Animal Feed Programs

- Organic waste is converted into animal feed for cattle and hogs. (Information on whether this program is company-wide was unavailable.) (2 points)

Food Recycling Programs

- Company-wide program participates in composting and other recycling programs. (2 points)

Total Score for Costco: 14 Points

Data and information from “Waste Management” section of website at <https://www.costco.com/sustainability-waste-stream-management.html>. Company representatives declined to provide additional information.

Kroger

Summary

In many ways Kroger is a leader in the U.S. supermarket sector, with a clear, public goal to eliminate food waste through its Zero Hunger, Zero Waste plan. This plan, launched in September 2017, includes advocating for public policy solutions and educating shoppers. The company also utilizes effective marketing for its Zero Hunger, Zero Waste plan and asks communities, stakeholders and other partners for feedback on the program.

Although Kroger has committed to fighting food waste, at the time of this report the company has yet to fully implement some measures that are critical to tracking and reducing wasted food.

Kroger is developing metrics and tools to track and report its progress, which will be critical to reaching the company's goals. Kroger also plans to work with its supply chain to prevent food waste before it reaches the shelves. Transparent data reporting and comprehensive supply-chain initiatives would go a long way toward securing Kroger's place as a leader in addressing food waste. Implementing Kroger's Imperfect Produce program at all stores and publicly reporting and tracking data on the program's success would also be an authentic effort at food-waste prevention.

Analysis

Accountability (19 points possible)

Corporate Transparency

- Reported donating 69 **million pounds** of fresh food and 24 million pounds of non-perishables to local food banks in 2016. (2 points)
- Recycled 46,500 tons through anaerobic digestion and 158,000 tons through animal feeding in 2017 (compost data is not reported). In 2016, 164,000 tons were recycled via animal, industrial and composting programs. Plants recycled more than **600 million pounds of material** in 2016, a diversion rate of 99 percent. (1 point)

FOOD WASTE SCORECARD



KROGER

Number of U.S. Stores (approximate): 2,800
Locations: 35 states
Top Banners: Kroger, Ralphs, Dillons, Smith's, Fred Meyer (21 grocery retail banners)



POLICY	POINTS
Corporate Transparency	3 / 14
Company Commitments	5 / 5
Supply Chain Initiatives	4 / 8
Produce Initiatives	2 / 5
Shopping Support	1 / 7
Donation Programs	6 / 6
Animal Feeding Programs	2 / 3
Food Recycling Programs	1 / 2
TOTAL SCORE	24 / 50

Company Commitments

- Zero Hunger, Zero Waste vision aims to end hunger in local communities and eliminate waste across the company by 2025. (4 points)
 - Zero Waste Goal in all facilities (90 percent or better diversion). In 2016, **31 of 33** corporately managed manufacturing plants were designated as “zero waste” facilities.
 - In 2016, launched a program to achieve zero waste at all 42 distribution centers by 2020 with a focus on keeping cardboard, plastic and food out of the waste stream.
- Partner in the EPA’s WasteWise program, which provides tools to consistently benchmark, measure and communicate waste-reduction efforts and progress over time. Company’s goal is to meet and exceed the EPA’s zero-waste threshold of 90 percent in all facilities by 2020. (1 point)

***Zero Hunger, Zero Waste**

Kroger’s food-waste reduction program is brand new, but has made solid public commitments that, when implemented, have the potential to significantly raise Kroger’s grade.

The company is publicly committed to transparency, tracking and thorough reporting on program progress. Kroger promises several key elements of a successful food-waste program. The improvements of targeting in-store ugly fruit sales initiatives are particularly noteworthy, as well as the willingness to engage stakeholders to continue improving food-waste reduction efforts.

Prevention (20 points possible)

Supply Chain Initiatives

- Committed to working with the Marine Stewardship Council (MSC), which includes standards related to bycatch. By 2020 Kroger will source 100 percent of wild-caught seafood from fisheries that are MSC-certified, in MSC full assessment, in comprehensive Fishery Improvement Projects, or certified by other GSSI-certified programs. By 2020 Kroger will source at least 90 percent of its total volume from fisheries that are MSC-certified. Kroger is also committed to sourcing 100 percent of shelf-stable “Our Brands” tuna from the International Seafood Sustainability Foundation-participating companies and supports WWF Traceability Principles for Wild Caught Fish Products.” (2 points)
- Works closely with Feeding America and World Wildlife Fund to study and develop transparent metrics to track Zero Hunger, Zero Waste program progress. (1 point)
- Reduces wasted milk through strict quality metrics for incoming raw milk, keeping it cold and moving it through plants providing for a 10-day freshness guarantee (a leader in the industry). (1 point)

Produce Initiatives

- Imperfect Produce program for selling “ugly” or lower-grade produce available in some stores. (2 points)

Shopping Support

- Runs television ads for its Zero Hunger, Zero Waste plan. Asks communities, stakeholders and other partners for ideas and feedback on the program. (1 point)

Recovery and Recycling (11 points possible)

Donation Programs

- Surplus food-donation program active across all stores. (3 points)
- Donation program includes produce, dairy and/or meat in all stores. (2 points)
- **Established a \$10 million innovation fund** within *The Kroger Co. Foundation* to address hunger, food waste and the relationship between the two. Contributes \$3 million to assist Feeding America and its local member food banks during Bringing Hope to the Table, the company’s annual hunger-awareness campaign during the holiday season. In 2017 the Kroger Co. Foundation and the company’s retail divisions provided an additional **\$2.3 million** in grants to assist local hunger agencies and tens of thousands of small donations added up to nearly **\$19 million** for local hunger relief programs. (1 point)

Animal Feed Programs

- Animal-feed recycling program instituted at many stores. (2 points)

Food Recycling Programs

- Food-waste recycling program diverts surplus food, food scraps and fluids from landfills for composting, anaerobic digestion or industrial uses at 1,445 stores. (1 point)

Total Score for Kroger: 24 Points

Data and information from correspondence with company representative and public materials on company website at <http://sustainability.kroger.com/2020-goals.html>.

Publix

Summary

Publix provides some data on its donation and recycling efforts and works to improve data on seafood bycatch — a major source of supply-chain waste that's often overlooked. However Publix offers little information on any commitments, data or other initiatives to address food waste.

Publix must make a clear, public commitment to zero food waste by 2025 to show its customers and employees that it is serious about the issue of wasted food. It must also focus on initiatives up the supply chain to prevent food waste before it reaches the shelves. Reporting on total food waste and diversion by store or region would create accountability and transparency in achieving sustainability goals.

FOOD WASTE SCORECARD



PUBLIX

D

Number of U.S. Stores (approximate): 1,150
Locations: 7 states in the southeastern U.S.
Top Banners: Publix

POLICY	POINTS
Corporate Transparency	3 / 14
Company Commitments	0 / 5
Supply Chain Initiatives	2 / 8
Produce Initiatives	0 / 5
Shopping Support	0 / 7
Donation Programs	3 / 6
Animal Feeding Programs	2 / 3
Food Recycling Programs	1 / 2
TOTAL SCORE	11 / 50

Analysis

Accountability (19 points possible)

Corporate Transparency

- Reported donating 56.6 million pounds of food in 2016, 48.7 million pounds in 2015, more than 43 million pounds in 2014 and more than 36 million pounds in 2013. (2 points)
- Recycled 28,000 tons of organic material through animal-feeding programs and 20,500 tons through composting in 2014. In 2016 diverted more than 29,300 tons of food-waste byproducts from manufacturing plants — including whey from yogurt and cottage cheese from its dairy plant — which was sent to farmers to feed their livestock. (1 point)

Company Commitments

- None identified.

Prevention (20 points possible)

Supply Chain Initiatives

- First U.S. retailer to team up with Sustainable Fisheries Partnership on the Ocean Disclosure Project. Works to improve assessments and availability of accurate data on catches and bycatch from seafood suppliers. (2 points)

Produce Initiatives

- None identified.

Shopping Support

- None identified.

Recovery and Recycling (11 points possible)

Donation Programs

- Food-donation program at some stores. (2 point)
- Publix Super Market Charities donated \$5 million to Feeding America supporting food-waste and hunger reduction in 2016. (1 point)

Animal Feed Programs

- Animal-feed program at some stores. (2 point)

Food Recycling Programs

- Program that diverts surplus food, food scraps and fluids from landfills for composting, anaerobic digestion or industrial uses at some stores. (1 point)

Total Score for Publix: 11 Points

Data drawn from website materials only at <http://sustainability.publix.com/>. Email correspondence with company did not result in any additional information.

Target Stores

Summary

Target has launched some promising pilot programs in recent years to address food waste, most notably an in-store tracking system and waste-stream audits. The data from these pilots is not publicly available at this time. Target's food-waste reduction goal is due to be released in 2018 and includes plans to develop ways for employees to engage shoppers to help them avoid food waste, such as educating them on food storage.

Target must make a commitment to eliminate food waste by 2025 and expand its pilot tracking programs across all stores and distribution centers with publicly reported data in order to create accountability toward its goals and inform continued improvement in its food-waste reduction efforts.

Analysis

Accountability (19 points possible)

Corporate Transparency

- Piloted an in-store tracking program to prevent wasted food as well as waste-stream audits in 11 stores and four distribution centers in 2016 and 14 stores and three distribution centers in 2017 to better understand what is being sent to landfills. The company continues to audit locations to measure progress and inform programs, though the results are not publicly available. (2 points)
- Reported donating 61.8 million pounds of food to food banks in 2016. Piloting technology to provide store-level donation data. (2 points)

FOOD WASTE SCORECARD



TARGET STORES

D

Number of U.S. Stores (approximate): 1,800

Locations: Nationwide

Top Banners: Target

POLICY	POINTS
Corporate Transparency	4 / 14
Company Commitments	2 / 5
Supply Chain Initiatives	3 / 8
Produce Initiatives	1 / 5
Shopping Support	1 / 7
Donation Programs	5 / 6
Animal Feeding Programs	0 / 3
Food Recycling Programs	1 / 2
TOTAL SCORE	17 / 50

Company Commitments

- Goal to divert 70 percent of retail waste through reuse and recycling programs by 2020 (inclusion of food or organics material in this goal is unknown). A food-waste goal and plan to accomplish that goal are currently being finalized for release in 2018. (2 points)

Prevention (20 points possible)

Supply Chain Initiatives

- Working to achieve 100 percent sustainably sourced seafood and is currently at 97 percent (own-brand seafood products are at 100 percent). The sustainable seafood program was developed with environmental partner FishWise and other stakeholders and requires products to have green or yellow ratings in the Monterey Bay Aquarium's Seafood Watch program. This includes standards for minimizing bycatch or similar eco-certifications. (2 points)
- Cross-functional team works on strategies to reduce food waste across operations. (1 point)

Produce Initiatives

- Piloted an "aged-produce" sales program to sell produce for a discount when it is closer to its expiration date. Food pulled for cosmetic reasons may be donated if edible. (1 point)

Shopping Support

- Works to ensure perishables reach the sales floor faster so food spends less time in the supply chain, giving shoppers more time to eat it before it spoils. (1 point)

Recovery and Recycling (11 points possible)

Donation Programs

- Surplus food-donation program active across all stores. (3 points)
- Donation program includes produce, dairy and/or meat in all stores. (2 points)

Animal Feed Programs

- None identified.

Food Recycling Programs

- Organics recycling is sent to anaerobic digestion or compost sites based on availability of hauler capabilities. Organics-recycling program piloted in California has expanded to 93 locations across the company, with the goal for all California stores to be participating in the compost program by March 2018. (1 point)

Total Score for Target: 17 Points

Data and information drawn from email correspondence with company representatives and public materials at <https://corporate.target.com/corporate-responsibility/goals-reporting>

Trader Joe's

Summary

Trader Joe's has a well-established practice of selling imperfect produce in its regular produce aisles, which helps prevent food waste up the supply chain. The company also offers consistently low prices rather than using "buy one, get one" promotions that may encourage over-purchasing. Unfortunately the company has no formal commitment to food-waste reduction and has made little apparent effort to track and address the issue.

Trader Joe's must make a clear commitment to eliminate food waste by 2025 and increase its efforts to track and publicly report on wasted food in its stores and supply chain. With a business model centered on buying direct from suppliers, Trader Joe's has an enormous opportunity to prevent wasted food up the supply chain, while its creative marketing could be used to educate shoppers about food waste.

Analysis

Accountability (19 points possible)

Corporate Transparency

- Reported donating more than 70 million pounds of food in 2017. (2 points)

Company Commitments

- None identified.

FOOD WASTE SCORECARD



TRADER JOE'S

D

Number of U.S. Stores (approximate): 460
Locations: 42 states and the District of Columbia
Top Banners: Trader Joe's

POLICY	POINTS
Corporate Transparency	2 / 14
Company Commitments	0 / 5
Supply Chain Initiatives	2 / 8
Produce Initiatives	4 / 5
Shopping Support	2 / 7
Donation Programs	5 / 6
Animal Feeding Programs	0 / 3
Food Recycling Programs	1 / 2
TOTAL SCORE	16 / 50

Prevention (20 points possible)

Supply Chain Initiatives

- Sustainable seafood program includes reducing bycatch. (2 points)

Produce Initiatives

- Sells “ugly” or “second or third grade” produce whole in all stores. (3 points)
- Uses “ugly” produce in prepared or pre-cut foods. (1 point)

Shopping Support

- Does not use buy one, get one free offers. (2 points)

Recovery and Recycling (11 points possible)

Donation Programs

- Surplus food-donation program active across all stores with a donation coordinator in each store. (3 points)
- Donation program includes produce, dairy and/or meat in all stores. (2 points)

Animal Feed Programs

- None identified.

Food Recycling Programs

- Piloting in-store composting programs at some stores. (1 point)

Total Score for Trader Joe’s: 16 Points

Data and information drawn from email correspondence with company representative and public materials at <https://www.traderjoes.com/announcement/category/in-the-neighborhood>

Walmart

Summary

Walmart’s approach to working with its operations, supply chain and customers to reduce food waste —as well as its innovative efforts such as exploring blockchain technology and implementing creative imperfect produce solutions — puts it ahead of most other U.S. companies in the sector. Walmart has shown a commitment to food-waste reduction through supporting national and international goals and by funding (through its foundation) the ReFED initiative to develop a road map for reducing U.S. food waste.

However, Walmart must not only work to reduce food waste but commit to eliminating food waste by 2025. Measures that can prevent food waste from the start are particularly important for the company, given the retail giant’s outsized influence on the supply chain. Greater accountability and transparency regarding the amount of wasted food sent to landfill and effectiveness of its prevention and diversion programs would improve customer confidence as Walmart works toward its sustainability goals. One example is utilizing its Fresh Scorecard program in all stores and providing trackable public data on its successes.

FOOD WASTE SCORECARD



WALMART

B

Number of U.S. Stores (approximate): 4,672*
Locations: Nationwide
Top Banners: Walmart, Sam’s Club

POLICY	POINTS
Corporate Transparency	4 / 14
Company Commitments	3 / 5
Supply Chain Initiatives	7 / 8
Produce Initiatives	4 / 5
Shopping Support	5 / 7
Donation Programs	6 / 6
Animal Feeding Programs	2 / 3
Food Recycling Programs	1 / 2
TOTAL SCORE	32 / 50

Analysis

Accountability (19 points possible)

Corporate Transparency

- Some stores have a Fresh Scorecard to see how they performed each week and to examine opportunities for improvement based on information tracked by items in each store. (2 Points)
- Reported food-donation programs in U.S. stores and facilities donated more than 600 million pounds in Fiscal Year 2017. (2 Points)

Company Commitments

- Between 2010 and 2015, Walmart met its goal of reducing food waste by 15 percent in developing markets (not the United States). Its goal of reducing food waste by 10 percent in developed markets (including the United States) was not met. (2 points)
- Supports the United Nations goal of reducing global per capita food waste by half by 2030, and was one of 15 U.S. companies to publicly make the same pledge as part of the EPA's Food Loss and Waste 2030 Champions, which requires the company to report progress on its website. (1 point)

Prevention (20 points possible)

Supply Chain Initiatives

- Most fresh, frozen, farmed and wild seafood is sourced from companies that earned Marine Stewardship Certification or Best Aquaculture Practices (reducing bycatch) or are engaged in a Fishery Improvement Project per the company's Seafood Policy. (2 Points)
- Reported that it sold more than 250 million units through its "near expiration date" program in Fiscal Year 2017. (2 points)
- Encourages suppliers through its Project Gigaton initiative to support whole crop utilization and helps them track whole crop utilization to do so. (1 Point)
- Foundation provided World Wildlife Fund with a \$650,000 grant to study food waste to identify changes in production that could decrease waste and yield higher profitability for farmers, and to identify the options for diverting food waste that would have the highest benefit for people and the environment. Also provided funding to the World Resources Institute to advance the Food Loss and Waste Standard, an accounting and reporting tool adopted by the Consumer Goods Forum. (1 Point)
- Took a day and a half out of its produce supply chain, which extends freshness and shelf life when produce reaches customers. Recently launched the Eden system, which tracks freshness of produce from farm to shelf. In collaboration with IBM, is conducting two pilots using blockchain technology to create a digitized industry standard for supply chain traceability that could help cut down on waste by reducing supply chain delays. (1 Point)

Produce Initiatives

- Sells “ugly” or “second or third grade” produce whole in all stores, including regional programs such as “Spuglies” misshapen potatoes in Arkansas, Oklahoma and Texas, and the “I’m Perfect” line of imperfect apples in Florida. Adjusts product specifications to accept cosmetic variations; for example, it temporarily accepted smaller-size corn than usual during a shortage in 2017, preventing that crop from being discarded. (3 Points)
- Uses “ugly” produce in prepared or pre-cut foods. (1 Point)

Shopping Support

- Win in Fresh program focuses on food-waste prevention through the entire supply chain by improved store fixtures, providing associates tools and education on how to better care for food products and offering customers discounts on food close to its expiration date. (2 points)
- As of 2016, 92 percent of qualifying private-brand products have adopted or started transitioning to “best if used by” label, eliminating an estimated 660 million pounds of food waste. (2 Points)
- Regularly blogs about food-waste efforts, and a video aired at checkout about food-waste prevention has been viewed more than 10 million times. (1 Point)

Recovery and Recycling (11 points possible)

Donation Programs

- Surplus-food donation program active across all stores. (3 points)
- Donation program includes produce, dairy and/or meat in all stores. (2 points)
- Foundation has provided funding to secure nearly 200 trucks and more than 50 retail store donation coordinators to manage and distribute locally donated food in their communities. Associates volunteered more than 110,000 hours toward hunger relief and food donation in Fiscal Year 2017. (1 point)

Animal Feed Programs

- Animal feed programs in more than half of all stores. (2 points)

Food Recycling Programs

- Programs divert surplus food, food scraps and fluids from landfills for composting, anaerobic digestion or industrial uses at most stores. (1 Point)

Total Score for Walmart: 32 Points

Data and information from correspondence with company representative and public materials at <https://www.walmartsustainabilityhub.com/project-gigaton/waste>.

Whole Foods Market

Summary

Whole Foods has more zero-waste certified stores than any other certified company and a reputation for sustainability, but the company lacks any clear commitment to food-waste reduction and provides no data on the amount of food wasted, recovered or recycled. The company has some initiatives to prevent food waste in the produce aisle, but few other programs to address the overall issue.

Whole Foods must set clear, public goals to eliminate food waste by 2025. To live up to its reputation and commitment to sustainable agriculture and show customers and employees that it takes the issue of food waste seriously, the company must begin tracking and publicly reporting on the amount of wasted food sent to landfills and the progress and data of programs to prevent or divert it instead. It remains to be seen how Amazon will influence food waste practices in Whole Foods stores following the recent merger of the companies.

FOOD WASTE SCORECARD



WHOLE FOODS MARKET

Number of U.S. Stores (approximate): 450
Locations: 42 states and Washington, D.C.
Top Banners: Whole Foods Market

D

POLICY	POINTS
Corporate Transparency	0 / 14
Company Commitments	0 / 5
Supply Chain Initiatives	2 / 8
Produce Initiatives	4 / 5
Shopping Support	3 / 7
Donation Programs	4 / 6
Animal Feeding Programs	0 / 3
Food Recycling Programs	1 / 2
TOTAL SCORE	14 / 50

Analysis

Accountability (19 points possible)

Corporate Transparency

- No available data.

Company Commitments

- None identified.

Prevention (20 points possible)

Supply Chain Initiatives

- Committed to only selling wild-caught seafood from fisheries that are certified sustainable by the Marine Stewardship Council or rated either “Green” or “Yellow” by the Monterey Bay Aquarium Seafood Watch, both of which include bycatch standards. Has a longstanding collaboration with the Marine Stewardship Council on key issues like overfishing and bycatch. (2 points)

Produce Initiatives

- Sells “ugly” or “second or third grade” produce whole in some stores. (2 points)
- Uses “ugly” produce in prepared or pre-cut foods. (1 point)
- Repurposes in-store produce pulled back from shelves for cosmetic reasons into meals and pre-cut items. (1 point)

Shopping Support

- Has a “root-to-stem” salad bar initiative encouraging food-waste reduction in most but not all stores. (2 points)
- Periodically writes about food-waste programs and prevention tips on blog. (1 point)

Recovery and Recycling (11 points possible)

Donation Programs

- Surplus-food donation program active at all stores. (3 points).
- Donation program includes produce, dairy and/or meat at some stores. (1 point)

Animal Feed Programs

- None identified.

Food Recycling Programs

- Program diverts surplus food, food scraps and fluids from landfills for composting, anaerobic digestion or industrial uses at some stores. (1 point)

Total Score for Whole Foods: 14 Points

Data and information drawn from email correspondence with company representatives and public materials at <http://www.wholefoodsmarket.com/>.

Conclusion

The majority of the American supermarket sector lacks a clear and effective commitment to food-waste reduction, particularly when compared to its European counterparts. Most companies have food donation and recycling programs with publicly available data. But initiatives to prevent food waste in the first place are not as widespread, despite the social, economic and environmental advantages of prioritizing prevention. Many of the solutions outlined in this report were highly rated in ReFED's Retail Guide for their feasibility and/or profit potential.

Companies need to institute structural changes that shift toward progressive and transparent food-waste reduction policies. This includes publicly reported results to create accountability with partners, suppliers, shareholders and customers. Of the companies studied in this report, few have even taken the first step of tracking and reporting their overall food waste.

One company representative told us that “reporting on such granular information is time consuming.” Yet this investment of time is critical to advancing food-waste reduction industry-wide and could help save money and natural resources. In the face of a rapidly changing online and in-store retail grocery market, establishing clear, sustainable food-waste reduction policies can also increase a company's draw with customers.



There were many missed opportunities among the companies studied in this report. ALDI, for example, has a strong food-waste reduction program in its UK operations but has yet to export those efforts to the United States. Trader Joe's and Costco have bulk-purchasing business models that would lend themselves well to supporting whole crop purchases, yet neither has made a public commitment to do so. Publix has a system in place to track its seafood products within the supply chain, which could be similarly adapted to other products. Whole Foods has built a reputation on sustainability but has not made any specific public commitments to addressing food waste.

Just as it is important for supermarkets to take responsibility for food waste up the supply chain, they must also address the role they play in household food waste. When it comes to shopping initiatives, some companies have started instituting practices to maximize freshness or have supported standardized date labels.

However, there is an overall lack of creativity and understanding about how practices from stocking to sales influence shoppers and contribute to wasted household food. For example, one company claimed that “Buy-one get-one free provides retailers with the option to offer our customers products that are close to expiration date at a discounted price (thus reducing our food waste).” Yet data shows that buy-one-get-one-free offers are correlated with over-purchasing, which shifts the food waste burden onto customers. Proper information and strategic planning can eliminate these wasteful initiatives (ReFED, 2016; Natural Resources Defense Council, 2017).

Companies like Tesco have found that less wasteful, more shopper-friendly strategies include price reductions for staples and perishable items. To their credit, some U.S. companies have taken steps in this direction: Examples include Albertsons' Just-4-U app, which helps with meal planning, and Walmart's in-store shopper education initiatives.

Overall recommendations for resolving grocery food waste at the retail level include:

- Improve tracking of food-waste data with publicly reported results on the volume and types of wasted food as well as how many stores are participating in prevention and donation programs;
- Expand in-store initiatives to reduce food waste through improved stocking, packing and display measures as well as initiating customer-education programs;
- Extend cosmetic standards to sell imperfect produce across all stores with publicly reported data on volume processed and sold;
- Commit to purchasing whole crops from major suppliers and publicly report on how much of its suppliers' crops are being purchased; and
- Commit to zero surplus food waste by 2025.

Although steps need to be taken in other venues like households and restaurants to address food waste in the United States, supermarkets are often the gatekeepers between individuals and farms. As a result grocery retailers have the opportunity and the responsibility to lead the way in fighting food waste. By making a specific and time-based commitment to eliminating food waste and instituting policies that reduce waste from farm to fork, supermarkets can transform waste in the retail sector, help achieve national and international food-waste reduction goals, save money and, in turn, reduce harms to natural resources, habitat and wildlife.

Appendix A:

Methodology

The food-waste reduction efforts of the largest supermarket chains in the United States (by number of stores) and Tesco, U.K. were assessed and scored based on publicly available information including corporate sustainability reports as well as information provided directly by correspondence with company representatives. In many cases the companies provided narrative responses, which earned appropriate points for the presence of programs, yet did not earn points if the requested quantitative data was not provided.

Each company was scored in five overall categories in this report: Accountability, Prevention, Customer Education, Recovery and Recycling. Points were weighted according to the expected social, environmental and economic benefits of different food-waste reduction strategies based on the values of the Food Waste Recovery Hierarchy (see Introduction).

However, the greatest weight within a category was given to accountability: corporate transparency with publicly available food-waste data and time-based commitments to zero food waste. The effectiveness of food-waste reduction efforts can only be measured through clear baselines and goals, thorough tracking and data reporting, and by being accountable to customers and shareholders. The most points in this category were awarded for public reporting of how much food was disposed of through landfill or incineration since that data would show the extent of the problem and, over time, the effectiveness of food-waste reduction policies.

Preventative measures, such as supply-chain initiatives that avert surplus food at the source, were allotted the second-highest point values due to their high priority in the Food Waste Recovery Hierarchy used by the Environmental Protection Agency and other organizations addressing food-waste reduction.

Source-reduction efforts, such as in-store produce initiatives, were given priority over initiatives in the lower categories that recover or recycle food, since efforts to prevent excess production and waste at the source are more effective in reducing resource consumption than those that repurpose food that was unnecessarily produced. (Environmental Protection Agency (2017-e). Sustainable Management of Food.).

Landfill diversion programs such as composting and converting surplus food into animal feed were given the fewest possible points. These actions are lower on the hierarchy of food-waste recovery efforts than prevention efforts since they have fewer environmental and social benefits.

Within each category the highest points were given to programs that were comprehensive and applied across all company stores; fewer points were awarded to non-comprehensive programs that are not company-wide for efforts in the right direction.

Data was drawn from direct email correspondence with the companies over a period of months in the fall of 2017 or from publicly available data on company websites and reports. If the presence of an initiative in any category could not be determined based on publicly available information or company response, zero points were awarded. Some companies may have food-waste reduction initiatives in development that are not represented in this report. However, the scoring system was designed to highlight publicly available information (and information provided to us in communication with the companies) that indicates accountability and transparency, and which can influence behavior and understanding of food-waste issues from farm to fork.

Appendix B: Summary Chart of Company Scores

Company	Grade	Corporate Transparency	Company Commitments	Supply Chain Initiatives	Produce Initiatives	Shopping Support	Donation Programs	Animal Feeding Programs	Food Recycling Programs	Total Score
Walmart	B	4	3	7	4	5	6	2	1	32
Ahold Delhaize U.S.	C	11	5	3	1	1	2	2	1	26
Kroger	C	3	5	4	2	1	6	2	1	24
Albertsons Companies	C	4	3	3	2	4	3	2	1	22
Target Stores	D	4	2	3	1	1	5	0	1	17
Trader Joe's	D	2	0	2	4	2	5	0	1	16
Whole Foods Market	D	0	0	2	4	3	4	0	1	14
Costco U.S.	D	3	0	2	0	2	3	2	2	14
Publix	D	3	0	2	0	0	3	2	1	11
ALDI U.S.	F	2	0	2	0	0	3	0	0	7

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