



DELHAIZE AMERICA'S OPERATIONS IN THE UNITED STATES: FOOD WASTE IN STORES AND DISTRIBUTION CENTERS

A Case Study

ABOUT DELHAIZE AMERICA

Delhaize America is comprised of the Hannaford Supermarkets and Food Lion operating companies. Hannaford, which is based in Scarborough, Maine, operates 179 supermarkets in the northeast United States. Food Lion, which is based in Salisbury, N.C., has nearly 1,000 stores in 10 southeastern and mid-Atlantic states. Delhaize America is a US division of Amsterdam-based Royal Ahold Delhaize Group.

WHY IS DELHAIZE AMERICA MEASURING FOOD LOSS AND WASTE?

Reducing food waste in our operations reduces costs and is part of how we meet our promise to be a better neighbor.

A long-standing priority of our business has been to effectively manage the food that we offer our customers. Many years ago, we began partnering with local communities to redistribute safe, unsold food to reduce hunger. These actions were driven by real business needs, and real community needs—addressing them has made our business stronger.

More recently, we expanded our view up and down the value chain, finding new innovations with suppliers that reduce food waste and creating new business opportunities from food that would otherwise have been wasted.

We aim to prevent, or minimize, the amount of food that gets thrown away by our stores through:

- ▶ continual improvement in how we manage food ordering
- ▶ the rescue of edible products for hunger relief
- ▶ the diversion of inedible food items toward composting and biodigestion.

About This Case Study

This case study is part of a series that shows how companies and others are using the *FLW Standard* to measure and reduce food loss and waste. Find more case studies online at www.FLWProtocol.org.

About the FLW Standard

The *Food Loss and Waste Accounting and Reporting Standard* (or *FLW Standard*) helps companies, countries, cities and others quantify “food loss and waste”—what to measure and how to measure it—and encourages consistency and transparency in the reported data.

A summary of definitions and requirements of the *FLW Standard* can be found online along with related tools to help users report the scope of their inventory and select a method for quantification.

WHAT HAS BEEN YOUR EXPERIENCE WITH USING THE FLW STANDARD?

We have found the FLW Standard to be very helpful because it gives us a clear unambiguous way for talking about food waste. We participated in the development of the FLW Standard, pilot testing it to help our full company prepare for how we can get a more consistent baseline across our business.

We have been tracking food loss and waste for several years and report the amount publicly in our annual Sustainability Report. We are continuing to get more detail and consistency across our brands in the US. The table on page 4 shows how we meet the requirements of the FLW Standard.

WHAT CHALLENGES IN MEASURING FOOD LOSS AND WASTE HAVE YOU ENCOUNTERED AND HOW DID YOU OVERCOME THEM?

One of the challenges we face is getting associates (employees) on board with the importance of tracking food waste and handling donations. We struggle to achieve consistent in-store execution of expected standard practices in order to track food waste volumes.

We aim to overcome this through ongoing in-store programs highlighting what can and can't be put in the bins we've designated for food waste, and regularly reinforcing our standard practice to "scan out" product for donation (i.e., use mobile inventory scanners connected to the company database to record product we donate). We are taking steps to emphasize the importance of these processes.

One way we're doing this at Food Lion stores is to expand our signature "Moving to Zero Waste" program. The program is in place at 381 stores, and we hope to reach all stores by the end of 2018. On average, this program diverts over 150,000 pounds of food to hunger relief charities, composters, and animal feed operations weekly.

Another challenge is that while we have separate bins to collect food waste in our operations, food also ends up being placed in our compactors and dumpsters and we have to estimate its weight. The estimated data on food in our dumpsters is less certain than the data on food in compactors since the volume in dumpsters is an estimate we receive from our vendors. A related challenge is

subtracting the weight of packaging from the weight of the food discarded. To resolve this, we are working with our waste vendors to improve the tracking of what they pick up from our stores and distribution centers.

WHAT ACTION HAS DELHAIZE AMERICA TAKEN AS A RESULT OF MEASURING ITS FOOD LOSS AND WASTE?

As a result of continuous measurement since 2008 and implementing a range of food waste reduction procedures, we have seen a significant reduction in food waste. We continue to have more confidence in the metrics we are using to evaluate our progress and recently started tracking our progress on a quarterly basis using three metrics: tonnes of food waste per sales, percentage of food waste recycled (i.e., diverted from landfill), and tonnes of food donated.

The following are a few examples of actions we've taken as a result of tracking food waste.

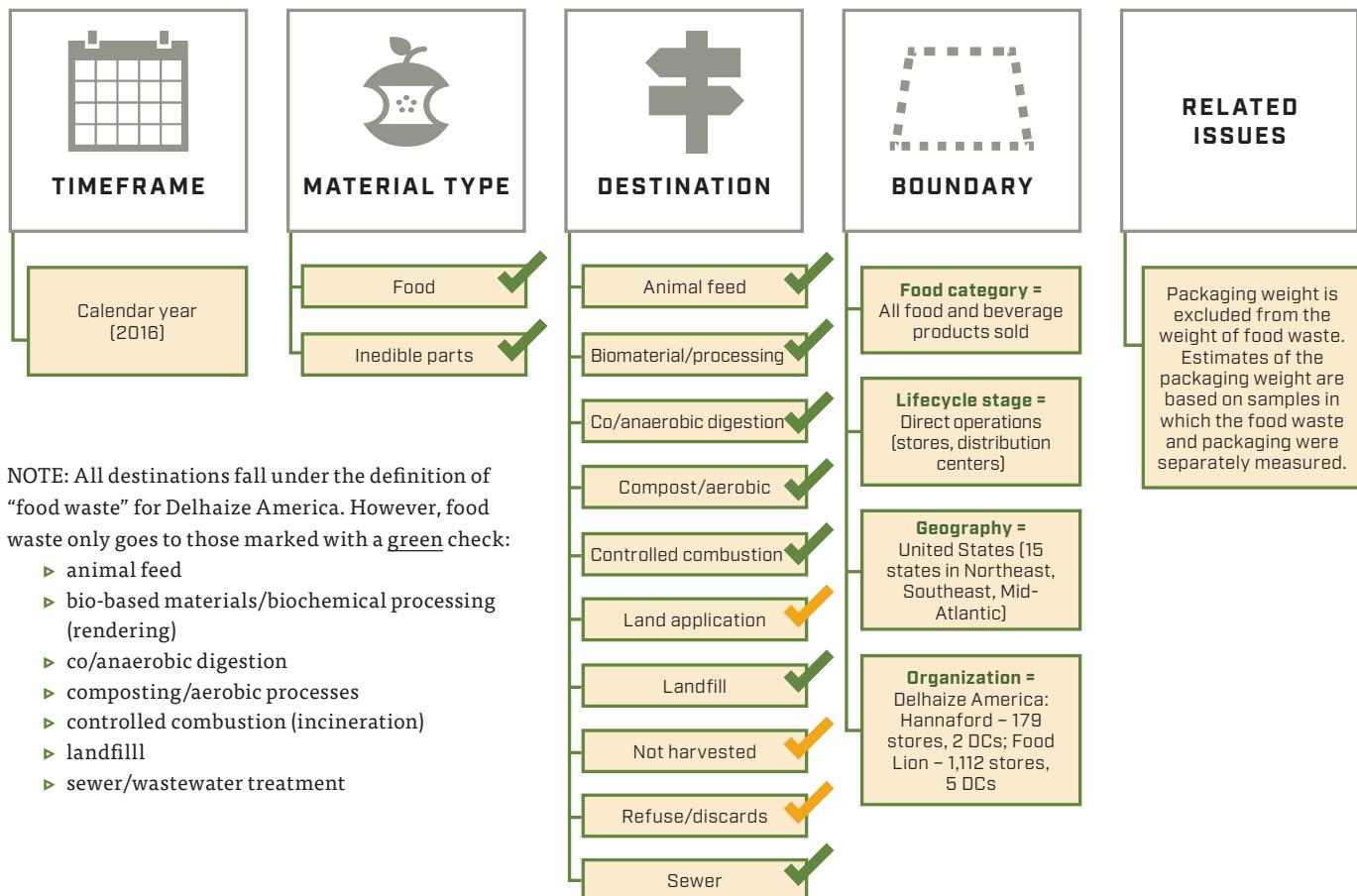
A few years ago Hannaford implemented fresh product deliveries on a daily basis versus 3-4 times per week. Daily deliveries led to more accurate ordering, less food waste, and an improvement in quality. Using Computer Assisted Ordering (CAO) has also helped us reduce food waste (and save money), as it improves our ability to manage inventory in real time. For example, when we implemented CAO in stores, we were able to reduce waste in bagged salads by 50 percent.

As another example, 53 Hannaford stores have partnered with a local anaerobic digestion system at a dairy farm to recycle Hannaford's packaged food waste. A de-packaging unit at the farm removes the packaging, allowing the food waste to be recycled into compost and biogas that the dairy farm uses to reduce its carbon footprint. Participating stores reduced food waste going to landfill by 56 percent through this innovative project.

In a pilot program at a Food Lion store in North Carolina, tracking the composting rate was important since when that increased, it signaled a need to better coordinate with the nonprofits that pick up food to ensure the store was not throwing away, or composting, food that could actually be donated. Focusing on food waste prevention also allowed the store to reduce the number of dumpsters the store sent to the landfill weekly from six to one, which reduces our waste disposal costs.

WHAT IS INCLUDED IN THE SCOPE OF THIS FLW INVENTORY?

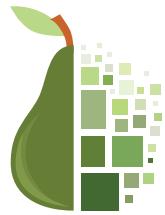
The following figure visually represents the scope of Delhaize America's food waste inventory for its stores and distribution centers using the *FLW Standard*. While all possible types of destinations fall under the definition of food waste for Delhaize America, food waste only goes to those marked with a green check mark.



HOW DOES THIS INVENTORY MEET THE *FLW STANDARD*'S REQUIREMENTS?

The table below provides a summary of how Delhaize America's FLW inventory meets the eight reporting and accounting requirements contained in the *FLW Standard*.

FLW STANDARD REQUIREMENTS & DESCRIPTION OF DELHAIZE AMERICA'S FLW INVENTORY	
(see www.FLWProtocol.org for details and guidance)	
1. Base FLW accounting and reporting on the principles of relevance, completeness, consistency, transparency, and accuracy	
<ul style="list-style-type: none">► Relevance: Data informs waste reduction activities► Completeness: All stores and distribution centers included► Consistency: Use same methodology each year► Transparency: Methodology, including assumptions, is shared with internal decision-makers► Accuracy: Calculation is validated by internal audit. Ongoing work to reduce uncertainties	
2. Account for and report the physical amount of FLW expressed as weight	Reported as tonnes
3. Define and report on the scope of the FLW inventory (see <i>FLW Standard</i> for additional details)	
Timeframe: Calendar year (2016)	
Material type: Food and associated inedible parts	
Destinations: All destinations fall under the definition of "food waste" for Delhaize America, but food waste only goes to some: animal feed, anaerobic digestion, bio-based materials/biochemical processing (rendering), composting, controlled combustion (incineration), or landfill	
Boundary:	
<ul style="list-style-type: none">► Food category: All food and beverage (UNCPC2.1 Div. 21 – 24)► Lifecycle stage: Direct retail operation and distribution centers (DCs)► Geography: US; 15 states in Northeast, Southeast, Mid-Atlantic US regions► Organization: Hannaford – 179 stores, 2 DCs; Food Lion – 1112 stores, 5 DCs	
Related issues: Packaging weight is excluded. Estimates of the packaging weight are based on samples in which the food waste and packaging were separately measured	
4. Describe the quantification method(s) used. If existing studies or data are used, identify the source and scope	Records from waste management vendors
5. If sampling and scaling of data are undertaken, describe the approach and calculation used, as well as the period of time over which sample data are collected (including starting and ending dates)	N/A
6. Provide a qualitative description and/or quantitative assessment of the uncertainty around FLW inventory results	Sources of uncertainty include estimates made about the: <ul style="list-style-type: none">► The weight of packaging► Total mass of food waste in dumpsters
7. If assurance of the FLW inventory is undertaken (which may include peer review, verification, validation, quality assurance, quality control, and audit), create an assurance statement	Extensive internal audit on process of collecting and recording data
8. If tracking the amount of FLW and/or setting an FLW reduction target, select a base year, identify the scope of the target, and recalculate the base year FLW inventory when necessary	N/A



Food Loss + Waste

PROTOCOL

ABOUT THE AUTHORS

This case study was submitted by Kasey Harris, John Laughead, and George Parmenter (Delhaize America) with input and review by Liz Goodwin, Craig Hanson, Richard Waite, and Kai Robertson (representatives of WRI), as well as FLW Protocol Steering Committee representative Scyllia Ahlouwa (The Consumer Goods Forum).

ABOUT THE FOOD LOSS AND WASTE PROTOCOL

The Food Loss & Waste Protocol (FLW Protocol)—a multistakeholder partnership—has developed the global *Food Loss and Waste Accounting and Reporting Standard* for quantifying food and/or associated inedible parts removed from the food supply chain—commonly referred to as “food loss and waste” (FLW). World Resources Institute (WRI) serves as the FLW Protocol’s secretariat.

For questions, please contact flwprotocol@wri.org.

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