Full Belly Farm, a certified organic farm in California, is saving costs and labor since it replaced 8,330 waxed cardboard boxes with 2,000 reusable plastic totes with attached lids in July 2013.

Located 100 miles northeast of San Francisco and 50 miles northwest of Sacramento, Full Belly Farm delivers vegetables, fruits, nuts, and flowers to restaurants, farmers’ markets, and members through drop sites around the Bay Area and Sacramento.

For years, the grower used waxed cardboard boxes for produce distribution to farm members who pay in advance for weekly deliveries. Wax on the boxes increased the life of the boxes allowing them to be reused several times, but it also rendered the boxes non-recyclable and non-compostable. Also, the boxes only lasted four or five trips.

**MEASURABLE IMPROVEMENTS:**

- Annual cost savings of $14,161 in avoided waxed cardboard box purchases.
- Eliminated daily labor needed to set up, stack and line cardboard boxes.
- Avoided 6.54 tons of cardboard waste annually.
- Eliminated 34.1 tons of greenhouse gas emission annually.
The grower went in search of durable reusable transport packaging that would last hundreds of trips. The containers needed to withstand exposure to summer sun and winter rain and temperatures between 40 and 120 Fahrenheit degrees, and protect produce during shipping distances up to 150 miles. The totes also had to be food-safety FDA approved, meet certain size and weight specifications, stack and nest, and be easy for customers and employees to handle.

With a $15,000 grant from Alameda County 3StopWaste.Org’s UseReusables program, the farm purchased 2,000 ORBIS Flipak FPD06 reusable totes with attached lids. The totes measure 19.9”x11.6”x7.5”, are nestable, and have holes in the sides for air circulation to keep the produce fresh.

Employees pick and wash the produce, and then pack a combination of items in the ORBIS totes. The totes are stacked onto pallets and then stored for a few hours in a cooler, or loaded directly onto a truck for delivery. The delivery sites include a handful of restaurants and retail outlets, and Full Belly Farm’s 44 residential produce pick-up sites and three farmers markets. Full Belly staff unload the produce boxes onto hand trucks and stack them up for members to claim. The grower alerted its member customers about the change in process through its weekly newsletter. The newsletter asked members to bring reusable bags to the drop off sites to collect their produce. Afterward, the reusable totes are returned to the farm for reuse the following week.

By switching to reusables, Full Belly Farm is saving $14,161 per year in avoided waxed cardboard box purchases.

“The price of cardboard boxes continues to go up... Our total dollar savings will be at least ten times the number that we save in one year.”

“These savings will continue every year, as long as the boxes last, and we expect that will be 10 or 15 years at least,” said Judith Redmond, co-owner of Full Belly Farm. “Also, the price of cardboard boxes continues to go up. So our totes will become more and more valuable over time. Our total dollar savings will be at least ten times the number that we save in one year.”

The small farm also is saving on labor. The waxed cardboard boxes were stored flat and had to be formed and stacked every morning for filling. After assembly, the boxes were lined with paper that was disposed between uses. Lining the boxes required an additional person on the filling line — a considerable cost for a small business. The totes are ready to use without assembly each morning. The totes do require washing; however, Redmond believes they are still saving time in labor.

Keeping Operations Green

The savings in cost and labor are valuable; however, the bigger win for Full Belly Farm is reducing its footprint on the environment. Switching from waxed cardboard boxes to reusable totes eliminates 6.54 tons of cardboard waste going to the landfill each year; and reduces greenhouse gas emission by 34.1 tons, according to the EPA’s WARM Greenhouse Gas Emissions calculator.

“As a leader in the organic community, we are continuously looking for ways to reduce the environmental impact of our operations. All of us at Full Belly Farm strongly believe that it is important to reduce unnecessary packaging,” emphasized Redmond. “These totes will last many years, saving money and reducing waste over their entire life span.”
“Organic produce harvesting and distribution are ideal applications for reusables,” added Norm Kukuk, vice president of marketing for ORBIS Corporation. “We worked with Full Belly Farm and recommended the FPD06 for this organic produce application. Standardizing on this tote drives labor savings, faster deliveries, and more efficiency at the pick-up sites.”

About Full Belly Farm
Full Belly Farm is the winner of the 2014 Reusable Packaging Association Excellence in Reusable Packaging Award for businesses with revenues less than $25 million.

Full Belly Farm, located in northern California, has been using organic practices since 1985. With the help of a dedicated, year-round, hard-working crew, the farm grows vegetables, fruits, nuts, flowers, and eggs. Three families own the farm and work there full time. The farm maintains habitat areas for beneficial insects, pollinators, and wildlife, and integrates crop production with long-term environmental stewardship. http://fullbellyfarm.com/

About the RPA Excellence in Reusable Packaging Award
The annual award recognizes companies that have developed, supported, or implemented measurable and innovative reusable solutions in a business-to-business supply chain. Non-members and members of the RPA are encouraged to enter.

Companies are judged on the quantifiable environmental and economic benefits of their reusable packaging solutions and services. Submissions are reviewed by an independent committee of judges who are not members of the RPA. The award is sponsored by International Contract Molding, LLC, an Otto Company; and supported by the U.S. Environmental Protection Agency, Reusable Packaging Machinery Institute, and StopWaste.Org.

Applications for the award are accepted in the spring. Visit www.reusables.org to learn more.