Industrial Compostability as a Prerequisite for BPI Home Compostability Certification

Items certified by BPI for home compostability must also be certified as industrially compostable to ASTM D6400 by BPI. Home and industrial certification can be obtained at the same time or home certification can be added to items that already have BPI industrial certification. BPI made industrial certification a prerequisite for home certification for technical, legal, reputational, and mission-driven reasons. BPI intends to continue having ASTM D6400 be the baseline specification for all BPI certified products/materials.

From a scientific view, an item being certified as home compostable doesn't ensure that it will break down as desired in an industrial compost facility and vice versa due to varying conditions between the two systems. Typically, home compost bins have cooler temperatures, lower moisture and oxygen, and slower composting times, while industrial systems are hotter and faster due to their larger volume and professional management. These differences can affect the presence and functioning of the macro- and micro-organisms that break down material in a compost setting, which can impact material decomposition. Because of these differences and the likelihood of home certified items finding their way into industrial compost streams, we need testing and certification to ensure that industrial composters don't have any reason to doubt accepting an item with home compost certification. Stream contamination is already a challenge for composters, so ensuring that any BPI product that reaches an industrial facility can successfully degrade will help BPI focus on helping composters mitigate contamination, rather than complicating the challenge further.

In addition to the differences in biological environments, there are obvious differences in capacity between home and commercial compost operations. The smaller capacity of home bins limits the amount of compostable products that can effectively be composted at home. Having both home and commercial composting options for a product's end-of-life provides consumers with flexibility in managing their pile volume at home while still ensuring that the product can still be composted in an industrial facility served by a collection program.

Certification to both schemes also enables home compostables to be compliant with current laws that require products labeled "compostable" to meet ASTM D6400. This is a standard for industrial, not home, compostability. Changing state laws to add home compostability standards is a slow process. Just like having ASTM D6400 as the baseline in BPI's commercial compostability scheme (with D6868 and D8410 as add-ons), pairing BPI's home and industrial certifications allows the new home compostable certification to fulfill legal requirements wherever ASTM D6400 is required.

BPI's mission is to divert more organics from landfill using compostable products as a vehicle, while not harming composting operations or soil health. Having clear claims that are understandable by everyone across the value chain is important. Pairing home and commercial certification allows BPI to fulfill this mission, making sure that consumers and composters alike know what items go in the home and/or commercial compost bin.