



Beyond the Buzzwords: Understanding Bio-Based, Biodegradable & Compostable Materials

Building Trust in Compostable Products

NERC Webinar | Margaret Eldridge | June 22, 2026

About BPI

Founded in 1999, **BPI is the leading authority on compostable products and packaging.** We are a 501(c)(6) membership-based organization of stakeholders.



Vision

A World Without Organic Waste



Mission

We support the shift to a circular bioeconomy by advancing policy, standards, research, and science-based verification of compostability and biodegradability.



Core Objectives



Claims: Advance trusted and scientifically based standards, research, and claims.



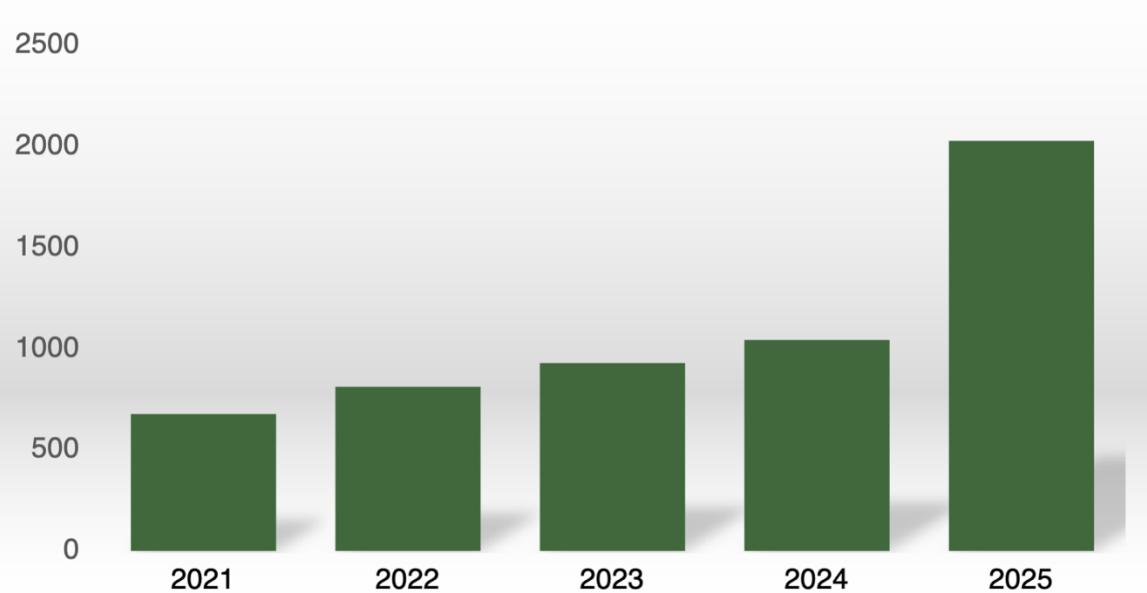
Adoption: Align and collaborate with stakeholders across the value chain to advance BPI's mission.



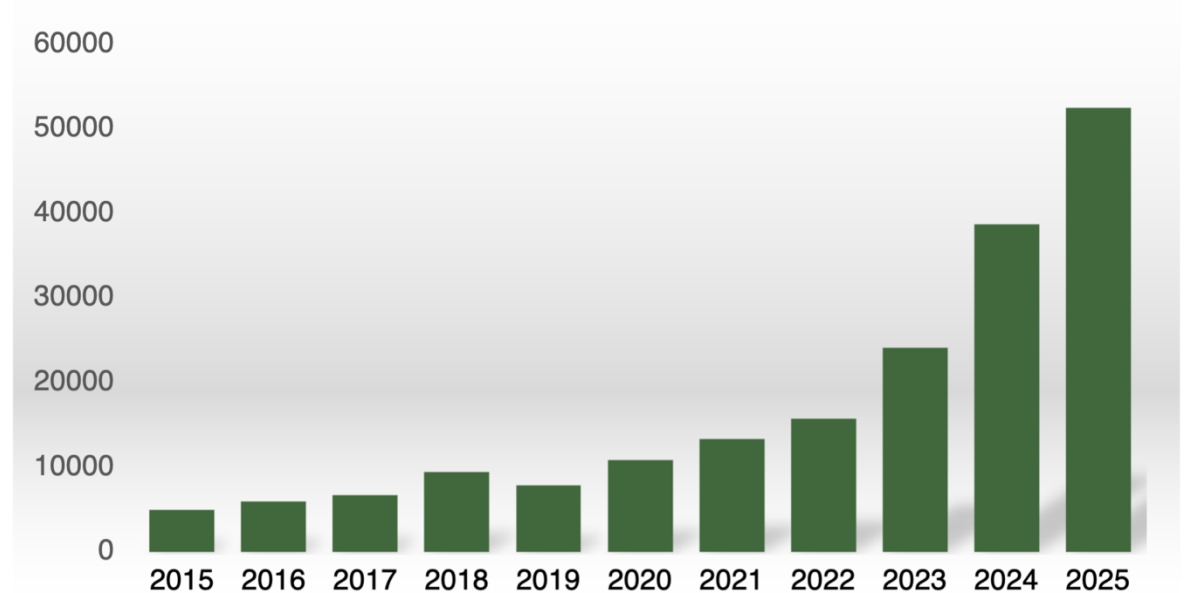
Policy: Influence policy that supports a systems-based approach to products and materials.

Certification Snapshot

Total BPI Certificates



Total SKUs Certified





Compostability Value Proposition

What is Compostability

Compostable = capable of undergoing aerobic biological decomposition in a compost system, such that the material becomes visually indistinguishable and breaks down into carbon dioxide, water, inorganic compounds, and biomass (*from US Composting Council Model Labeling Bill*)

Compostable claims describe both an:

- **Attribute**, based on performance of tests in ASTM standard specifications
- **Instruction**, identifying which bin to place it in



Compostability certification marks provide **a clear and single point of communication across all stakeholders in the value chain**, from raw materials to composters, consumers, and government.

Why Does Compostability Matter?



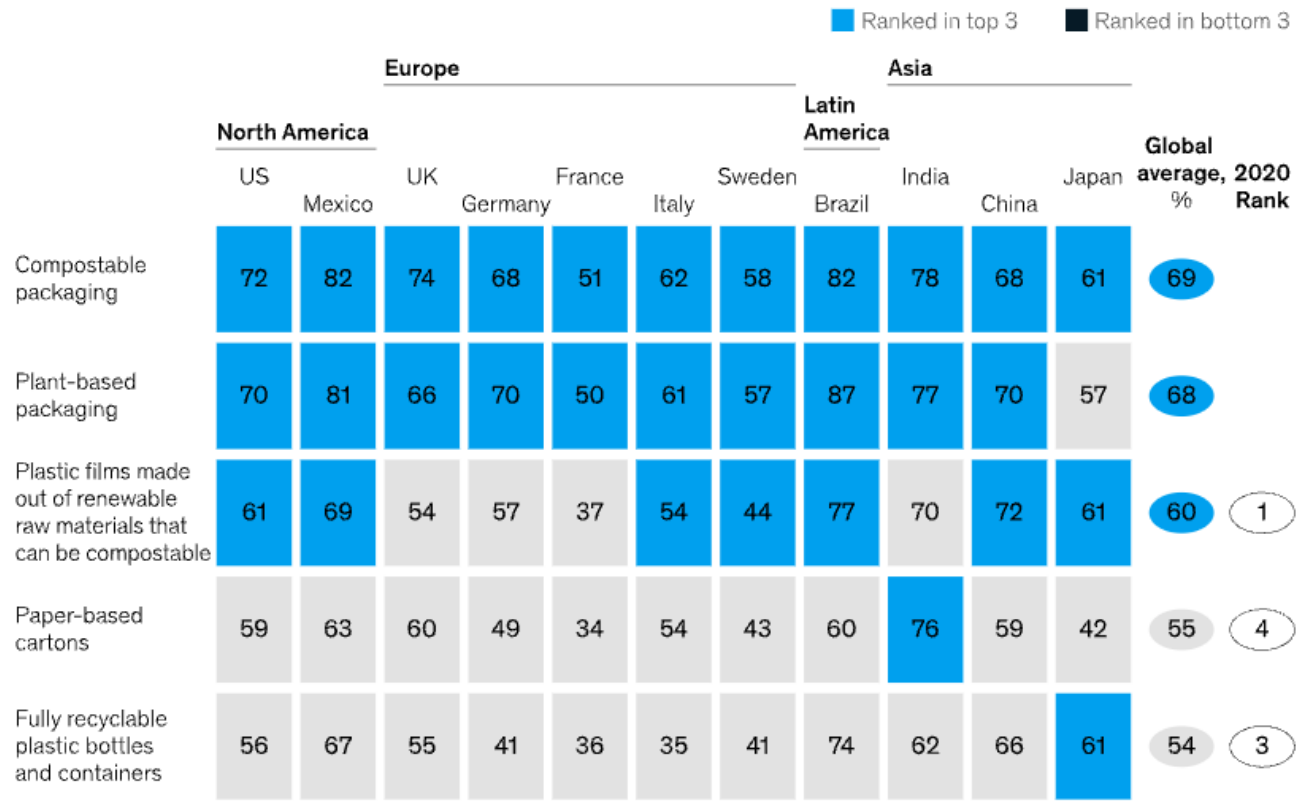
Consumer Interest In Compostable Packaging

Compostable, plant-based packaging was the top preference for consumers around the world.

People understand the inherent value of materials that will biodegrade and not persist in the environment.

Consumer perceptions around the world are starting to align with compostable solutions.

Q: "How sustainable do you think each of these packaging types are?," ranked by number of respondents who indicated "extremely" or "very strong," %



Source: McKinsey Sustainability in Packaging 2023



Why Certification Matters

Why Does Certification of Compostable Products Matter?

- Conflicting and vague "green" claims in the marketplace
- Compostability is complex (i.e., it's not a single test, and there are complicating factors beyond the science)



The Challenge of No Certification

Without certification, compostability claims can be difficult to verify.

Risks of Unverified Claims:

- Consumer confusion
- Contamination of compost streams
- Operational challenges for compost facilities
- Greenwashing concerns
- Reduced trust in compostable products



Benefits of Certification

- Builds trust
- Clear and single point of communication across the value chain
- Consistent requirements
- Independent verification
- Increased confidence throughout value chain
 - Manufacturers > Retailers & Brands > Consumers > Composters > Government & Regulatory
- Support for compost facility acceptance





About Certification

BPI Certification Types

Commercial Only



COMMERCIAL ONLY

CONDITIONS AFFECT
PRODUCT BREAKDOWN.
ACCESS TO COMPOSTING MAY
NOT EXIST IN YOUR AREA.
CERT #0000000

Commercial & Home



COMMERCIAL & HOME

CONDITIONS AFFECT
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Types of Products Certified

Agricultural | Bags | Resins & Ingredients | Food Packaging | Foodservice Ware | Pet Waste Products



Compostability Standards



ASTM INTERNATIONAL

Commercial Compostability

D6400 - covers labeling of polymers and finished products designed to be composted in industrial facilities and is the base standard for all BPI certifications.

D6868 - covers labeling of finished products that incorporate polymers as coatings or additives with paper, fiber and other substrates designed to be composted in industrial facilities.

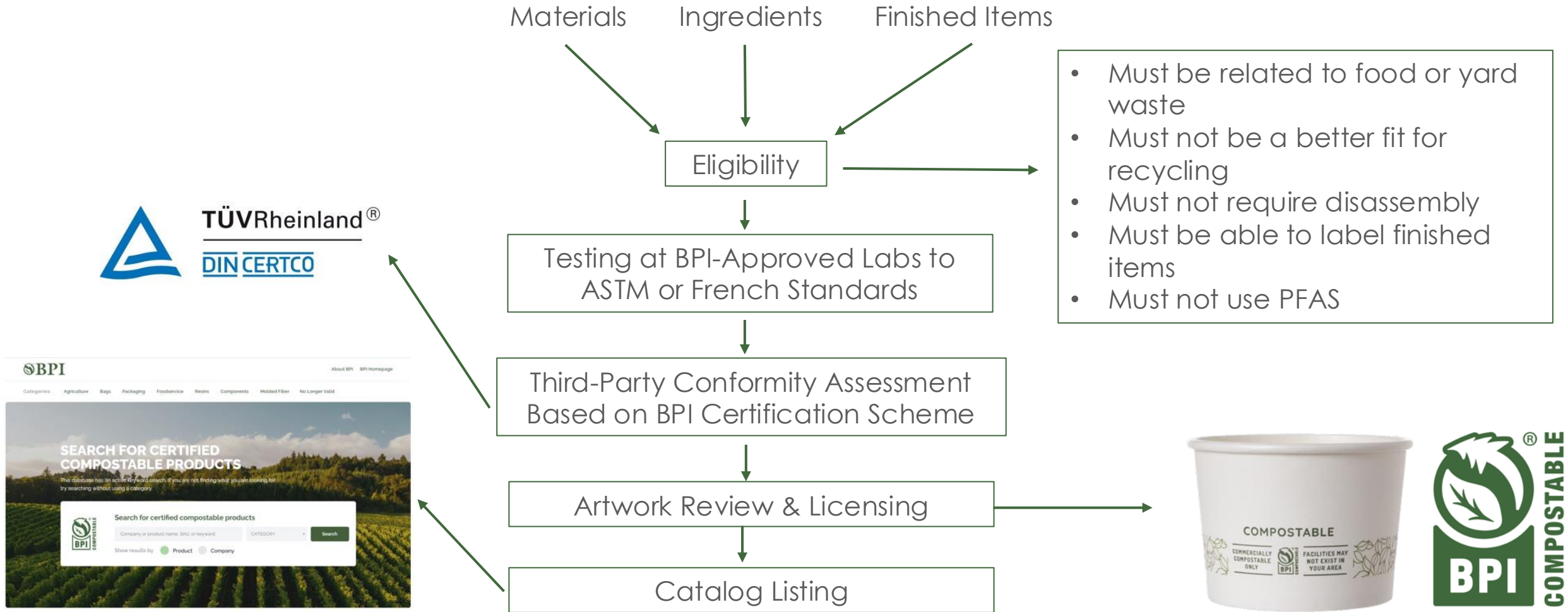
D8410 - covers labeling of finished products that are made of uncoated fiber/paper items and coated fiber/paper items that don't have a thermoplastic polymer coating designed to be composted in industrial facilities.



Home Compostability

NF -T - 51-800 - covers labeling of ingredients and finished products that are made of plastic that are suitable for home composting, but is applied to all material types as the base of BPI's Home Compostability Certification.

Overview of BPI Certification

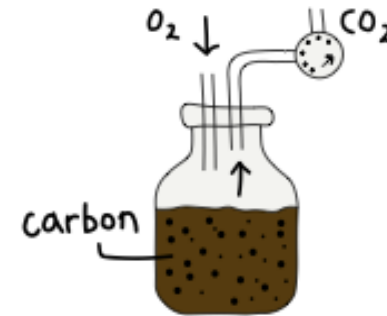


Requirements from Standards for BPI Certification

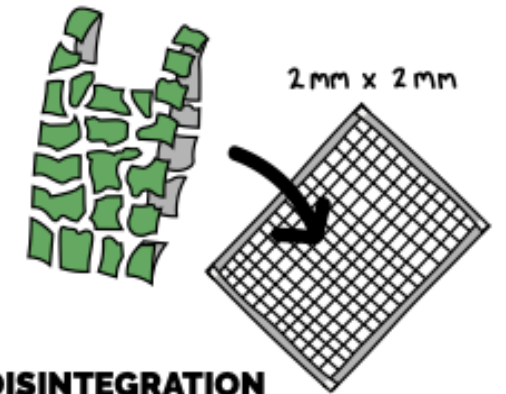
Disintegration (90% in 84/180 days) – finished product must physically and visually break down

Biodegradation (90% in 180/360 Days) – organic carbon must be converted to CO₂

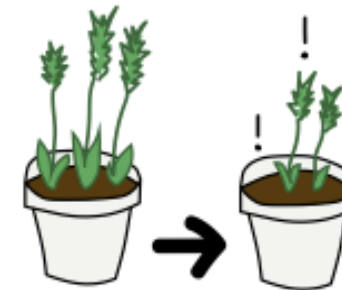
No Adverse Impacts – product and ingredients tested for plant toxicity and heavy metals



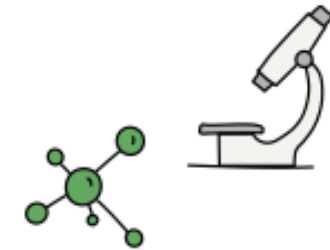
BIODEGRADATION



DISINTEGRATION



ECOTOXICITY



REGULATED ELEMENTS

Additional Requirements for BPI Certification



BPI's Requirements to Increase Acceptance in Composting System

Eligibility Criteria – Connection to food scraps, can't be a better fit for recycling, no disassembly.

Fluorinated Chemicals (PFAS) –Free of intentionally added fluorinated chemicals and below 100 ppm total organic fluorine.

On-Item & On-Package Labeling – All certified items and packaging must display the BPI Certification Mark.



Compostables and Persistent Microplastics: An Increasingly Important Question

Consumers and policymakers are increasingly asking:

Do certified compostable products create persistent microplastics?

BPI-Certified Products

- Must demonstrate disintegration
- Must demonstrate biodegradation of total product and ingredients

Scan to watch a Q&A with
Normec OWS on lab tests for
compostability:

bit.ly/labtestsforcompostability



Why Persistent Microplastics Matter in Compost

Protecting Compost Quality

Compost is intended to:

- Improve soil health
- Support agriculture
- Return nutrients to the environment
 - Persistent plastic contamination undermines these goals.

Certification Helps Ensure

- Materials break down biologically
- Compost quality is protected
- End users have greater confidence in compost products



But Certification Alone Isn't Enough

Labeling & Regulations Play a Key Role

- Consistent labeling requirements
- Reduced misleading environmental claims
- Better consumer education
- Greater alignment among states and jurisdictions
- Improved market certainty

Challenges of a Patchwork System

Different states often have:

- Different labeling requirements
- Different product restrictions
- Different definitions of compostability

Consequences

- Increased compliance costs
- Consumer confusion
- Market complexity
- Challenges for national brands

Key Takeaways



- BPI provides independent certification of compostable products.
- Certification helps ensure products meet recognized compostability standards.
- Standards require biodegradation, disintegration, and protection of compost quality.
- Compostability standards are designed to prevent persistent plastic contamination and microplastics in compost.
- Clear, consistent labeling and regulations improve trust, education, market certainty and composting outcomes.



 **BPI**

COMPOSTABLE

COMMERCIALY
COMPOSTABLE
ONLY



FACILITIES MAY
NOT EXIST IN
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COMMERCIALY
COMPOSTABLE
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COMPOST

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