

Principles to Inform Sustainable Packaging Recommendations

Prepared by ASBC's Sustainable Packaging Working Group

Defining the Problem:

Packaging makes a range of desirable economic and social outcomes possible, from protecting life-saving medicines, to reducing food waste to ensuring that goods can be transported from where they are produced to where they are consumed. Nevertheless, packaging in our current system is most often used once and then disposed of into an inadequate waste management system that consigns it to landfills, or worse, leaks it into the natural environment. Pollution from packaging and other solid waste has reached the level of global catastrophe, inundating natural systems to contaminate water and soil alike.

The current system of packaging production and waste management was not built to sustain the volume of global commerce we see today. Further, existing market mechanisms for materials capture and reuse are weakening as supply outstrips recycling capacity. As a result, a systems-level overhaul of how we design, use and dispose of packaging is necessary, with circularity and sustainability prioritized at its center and the ultimate goal of a zero waste economy.

Meeting this challenge will require broad collaboration across public and private sector actors -including governments, producers, retailers, consumers and more. The American Sustainable
Business Council Sustainable Packaging Working Group has convened to create a platform for
just such a collaboration. The following principles are the tenets that guide the
recommendations and actions of this working group.

Principle 1 - Materials Circularity

A circular economy is necessary to ensure that the Earth's natural resources are available to meet the needs of current and future generations. Circularity will not happen by accident, and must be carefully designed. The Ellen MacArthur Foundation bases circularity on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating

natural systems. Consistent with this principle, a well designed packaging system should not generate waste or pollution (all packaging materials should be recovered) and all recovered materials should be kept in use (reused or recycled). We recommend that a circular system should:

- Prioritize material reuse and promote collection of recyclables and compostables separate from the solid waste stream
- Incorporate the highest levels of recovered materials
- Minimize environmental impact through production, use, and recovery
- Avoid use of substances classified as exhibiting toxicity
- When not reusable, design for controlled recovery options of either recycling or composting, and cause minimal harm if accidentally leaked into the environment

Principle 2 - Shared Responsibility

Solutions to the global waste challenge associated with product packaging are to be found in the contributions of governments, producers, materials management providers, retailers, and consumers. No single actor can do this alone - all responsible parties must comply with the requirements of the system.

- Governments at the federal, state and local level provide the regulatory framework and incentive structure for the infrastructure, standards, guidance, stakeholder engagement and enforcement to ensure that producers and consumers are participating in the circular economy. Infrastructure is not limited to public-sector ownership, and is inclusive of infrastructure owned by private companies that participate in the collection, management, and reuse of recovered materials. Governments have overall responsibility for the financial viability of the materials recovery and management infrastructure and may impose fees to ensure such viability. The regulatory framework, standards, and enforcement must ensure protection of human health and the environment. Governments should also enforce circularity by monitoring compliance and imposing penalties where violations are found.
- Producers (materials manufacturers, packaging manufacturers and product producers)
 must use packaging designed with circularity in mind, ensuring that is compatible with
 existing reuse and recycling infrastructure and technologies. This should include using
 materials that are recovered and readily recycled as well as designing packaging for
 disassembly and easy materials separation. Producers should also provide accurate and
 clear instructions for how to dispose of packaging.
- Retailers are expected to work with producers, consumers, and materials management
 companies to collect materials for reuse, to collect and manage fees from consumers,
 and to perform other functions as appropriate to the management of materials to achieve
 circularity.

- The Public needs to participate by learning what can and cannot be recycled and/or reused, participating in take-back programs, choosing low-waste products and disposing of packaging properly. It should be noted that consumers are reliant on producers and governments holding up their end of the bargain.
- Resource Recovery organizations involved with transferring, sorting and processing recyclables or compostables (excluding waste to energy) have an important role to play.

Principle 3 - Accelerating a Circular Market

The costs of a comprehensive and effective waste and materials management infrastructure should not be underestimated, however they should be understood to be small in comparison to the cost of global waste pollution. The way we, as a society, pay for what amounts to a revolutionary reinvention of a complex system of systems will differ from state to state and city to city based on local law, existing infrastructure and historical precedent. Despite this complexity, there are core principles that every sustainable packaging policy should take into account when it comes to paying for this system:

- Holistic Cost Assessment and Responsibilities: Sustainable packaging requires a
 long chain of investments in technologies and operations including design, materials
 selection, distribution, collection, and reuse/recycling of materials. When assigning cost
 to a given actor (governments, producers, retailers, consumers, etc.), the scope of their
 responsibilities, resources and existing investment needs to be taken into account.
- Direct Funding: Where fees are directly collected, they should be applied to the cost of
 operating and improving the material recovery system, public education, research, and
 infrastructure investment. Further, collected fees should be placed in a "lockbox" to
 ensure that money is strictly allocated to these activities and not used to support other
 programs or priorities.
- Incentivizing Innovation: Private companies and public leaders have a role to play in
 incenting development of solutions to innovation challenges through the range of tools at
 their disposal, including through procurement, preferential financing, prioritize permitting
 for sustainable waste management practices and facilities, funding matches,
 sustainability grants, challenge grants and etc.

Principle 4 - Transparency & Communication

Common understandings and expectations are crucial for mobilizing the resources necessary to confront this problem as well as enabling individuals to make sustainable decisions. At the same time, we cannot manage what we do not measure, and everything from innovation to

enforcement will rely on information collection up and down the value chain of sustainable packaging.

- Standards and Expectations: Standards for circularity in packaging should be set so that there is a level playing field and full transparency to all parties. This is a role that is best played by the Federal government, so that producers and regulators across all 50 states are guided by a common standard.
 - Standards should include guidance for clearly labeling packaging to allow convenient and economical sorting of materials into separate streams at all points in the material's life cycle in a way that maintains the value and use of the material.
- Educating and Empowering People: There is a shared responsibility among parties to
 provide education on proper recovery management options, and/or to help shift
 acceptance of new types of sustainable packaging that deviate from expectations. A
 transparent system allows all parties to make decisions that support sustainable
 outcomes, which, when aggregated, are a crucial component of success. Transparency
 also builds trust in the system.
- Accurate Measurement: Performance by all participants in the packaging cycle of production, use, recovery, reuse and disposal should be measured. These measurements should form the basis for an ongoing assessment and innovation process that identifies gaps and deploys resources that support the successful development of a circular economy as it relates to packaging. Weight is not a sufficient unit of measurement. One glass bottle weighs as much as 20-30 plastic bottles. If one glass bottle was recycled and 20 plastic bottles discarded, this would not appropriately be considered 50% recycling.
- **Enforcement**: A transparent system with clear standards and performance metrics will make system abuse possible to prosecute in proportion to the extent of violation.