



AMERICAN
SUSTAINABLE
BUSINESS
COUNCIL

Principles to Inform Circular Economy Recommendations

Prepared by ASBC's Circular Economy Working Group

Defining the Problem:

Sustainability is the ability to meet today's needs without diminishing the ability of future generations to meet their needs.

The current system of materials 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 recovery and recycling capacity. As a result, a systems-level overhaul of how we design, use and dispose of materials is necessary, with circularity and sustainability prioritized at its center and the ultimate goal of a zero waste economy.

Meeting this challenge requires broad collaboration across public and private sector actors -- including governments, producers, retailers, consumers and more. The American Sustainable Business Council Circular Economy 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 circular system should not generate waste or pollution (all materials should be recovered) and all recovered materials should be kept in use (reused or recycled). We recommend that a circular system should:

- Eliminate waste from product and packaging design and manufacturing
- Prioritize material reuse and promote collection of recyclables and compostables in a way that maintains their purity and integrity
- Incorporate the highest levels of recovered materials, and otherwise maximize the use of responsibly-sourced renewable inputs.

- Minimize environmental impact throughout 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 - Human-Centered Economies

Shifting to a circular economy also requires integration of the third pillar of sustainability: social equity. The UN Sustainable Development Goals incorporate social goals such as improved health, decent working conditions and reduced inequality. Successful circular systems should aim to:

- Be inclusive, accessible and affordable for everyone to be part of the solution
- Incorporate fair wages and safe and just labor practices
- Proactively address diversity, equity and inclusion in decision-making, policy-making, jobs and leadership
- Engage local/"affected"/stakeholder communities, such as those who live near factories, recycling plants, landfills or extractive and resource sites, in participatory processes for planning, negotiation and implementation
- Support economic and workforce development

Principle 3 - Shared Responsibility

Solutions to the global waste challenge 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 circular 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, materials management providers, retailers, and consumers are participating in the circular economy. Infrastructure should not be limited to public-sector ownership, and should be inclusive of infrastructure owned by private companies that participate in the collection, management, and reuse of recovered materials. Governments should have overall responsibility for the financial viability of the materials recovery and management infrastructure and should have the ability to 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 materials designed with circularity in mind, ensuring compatibility with existing reuse, recycling, or composting infrastructure and technologies. This should include using materials that are readily recovered and readily recycled as well as designing for durability, longevity, repairability, disassembly and easy materials separation. Producers

should also provide accurate and clear instructions for how to manage materials and packaging after use.

- **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, composted, and/or reused, participating in take-back programs, demanding and choosing zero-waste products, and managing after-use of products and packaging properly. It should be noted that consumers are reliant on producers, materials management providers, and governments fulfilling their obligations to ensure viability of the circular materials system.
- Materials Management Providers involved with transferring, sorting and processing recyclables and compostables have responsibility for materials recovery and management infrastructure including collecting and managing fees from consumers, and performing other functions as appropriate to the management of materials to achieve circularity.

Principle 4 - 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 and 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 circular materials policy should take into account when it comes to paying for this system:

- **Holistic Cost Assessment and Responsibilities:** Materials circularity 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 considered.
- **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, prioritized permitting for sustainable waste management practices and facilities, funding matches, sustainability grants, challenge grants, etc.

Principle 5 - 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 materials.

- **Standards and Expectations:** Standards for circular materials 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 products and 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 materials 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 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. 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.