

Sustainability & the Circular Economy

Overview

In a sustainable system, humans live in harmony with their environment, both meeting present societal, economic, and environmental needs while also preserving the ability of future generations to equitably meet those same needs. **Waste is a key factor to consider in a sustainable system: we must responsibly manage—and minimize—the waste we produce** in order to recover all possible materials for use as resources within economic production; minimize waste discharges into the environment; and ensure the social equitability of the positive and negative impacts of waste.

At GBB, we help our clients solve solid waste management issues by providing innovative, responsible, sustainable, and economical strategies and solutions for the benefit of communities and the environment. **The three pillars of sustainability —environment, economy, and equity — underpin all that we do.**

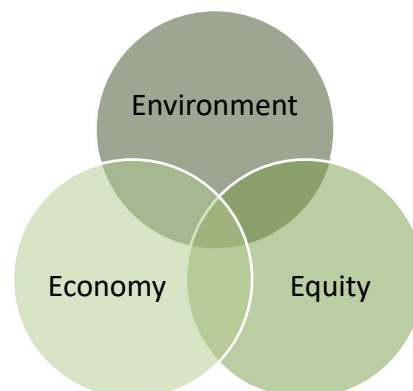
GBB's vision, a world where discarded materials are used as resources rather than wasted, is the basis of a circular economy. In contrast to the linear economy, which is based on a 'take, make, waste' model of consumption, in a circular economy, resources are not simply materials to be consumed, and waste is not just a burden to be managed. Rather, resources and waste are both valued nutrients throughout the economic production lifecycle. Circular economies aim to keep as many resources as possible within circulation at their highest level of utility, including what one would normally think of as waste. Waste is an important material input, or "food," for the production cycle of a circular economy.

Multi-Disciplinary Teams Led by GBB

Focused on helping communities plan and implement innovative, economically sound solid waste management solutions that protect the environment, **GBB is uniquely qualified and positioned to help our clients develop visions, strategies, and plans to achieve their sustainability and circular economy goals.** With its strategic approach, extensive experience, wide range of resources, and partnerships with firms specialized in areas of expertise key to the development of sustainability and circular economy initiatives, GBB leads multi-disciplinary teams that can assist local governments and private organizations in evaluating options, setting a long-term vision, developing strategies and plans, and facilitating and communicating this significant paradigm shift to stakeholders.

GBB understands the key elements necessary to successfully navigate the process:

- Facilitation of sustainability and circular economy visioning
- Long-term sustainability and circular design thinking/strategy
- Development of sustainable materials management and waste hierarchy policy documents
- Drafting of sustainable waste and materials management, zero waste, and circular economy strategies and plans
- High-level lifecycle and impact analyses within the context of the three pillars of sustainability
- TRUE Zero Waste certification assistance
- Project / Multi-disciplinary team management
- Stakeholder and cross-sector engagement, education, and partnership facilitation and collaboration



The three pillars of sustainability

Past Performance

GBB is proud of two of its ambitious circular economy projects expected to bring major economic (local investment), social (creating local jobs), and environmental benefits to their communities:



Development of a Sustainable Business Park - Kent County, MI

The County has set a bold goal to divert 90% of the trash that goes to landfills by 2030. Building a Sustainable Business Park, with the assistance of GBB as a planning partner, is an essential part of reaching that goal, will help significantly reduce trash buried in landfills and attract investment and jobs from companies that can convert waste into usable products. GBB assisted Kent County with developing the Master Plan for the Sustainable Business Park which will co-locate the processing of the existing waste stream supply (intake) with new processing and manufacturing opportunities to bridge the gap between waste and “food” for industrial processes. For the latest info on the project, visit: www.gbbinc.com/KentCounty



Development of the Prince William County Eco-Park - Prince William County, VA

GBB is assisting the County transform its landfill into an Eco-Park, a community resource producing energy, recovering valuable materials and providing unique opportunities for education. Latest info on the project: www.gbbinc.com/PrinceWilliamCounty

Thought Leadership

GBB Consultants and Officers author and present often on this topic. Recent articles and presentations include:

- [Building Something Sustainable](#), (April 2019) Ashlea Smith and Steve Faber; Waste Today magazine
- [Incentivizing Infrastructure for Sustainable Waste Solutions](#), (April 2019) Tom Reardon; published in the Waste Today magazine
- [Creating an Industrial Ecosystem](#), (January 2019) Steve Simmons; Jennifer Porter; and Kristen Wieland; published in MSW Management magazine
- [The Circular Economy: How Local Governments Can Close the Resource Loop](#), (November 2018) Corinne Rico; presented at the Illinois Counties Solid Waste Management Association Conference, Oglesby, IL
- [Advancing a More Circular Economy and the Reinvention of the Waste-to-Energy Industry through Sustainable Business Park Development](#), (June 2019) Tom Reardon and Jennifer Porter; presented at the Waste Conversion Technology Conference & Trade Show, Atlantic City, NJ
- [Energy Recovery in Resource Recovery Parks: The Kent County, MI Project](#), (October 2018) Steve Simmons; presented at the Waste-to-Energy Research & Technology Council Conference, New York, NY
- [Making Space for Sustainability: A Kent County Case Study](#), (May 2018) Jennifer Porter and Kristen Wieland; presented at the Michigan Recycling Coalition Conference, Kalamazoo, MI
- [Sustainable Business Parks – A Circular Economy](#), (May 2018) Chris Lund; presented at the Virginia Recycling Association/SWANA Old Dominion Joint Solid Waste & Recycling Conference, Virginia Beach, VA
- [Circular Solutions to a Growing Recyclables Market Problem](#), (April 2018) Jennifer Porter; Waste Today magazine
- [Is the US Ready for a Paradigm Shift in Solid Waste Management?](#), (December 2017) Steve Simmons; published in Waste Today magazine
- [Kent County, Michigan, Resource Recovery Park](#), (October 2017) Steve Simmons; presented at the Renewable Energy from Waste Conference webinar
- [Circular Economy Actions: Cities and Solid Waste Management](#), (June 2017) Steve Simmons; presented at the Sustainability and Circular Economy Summit, Washington, DC
- [Key Lessons to Draw from the Development of the Prince William Energy Park](#), (April 2013) Tom Reardon; presented at the North American Waste-to-Energy Conference, Sanibel Island, FL