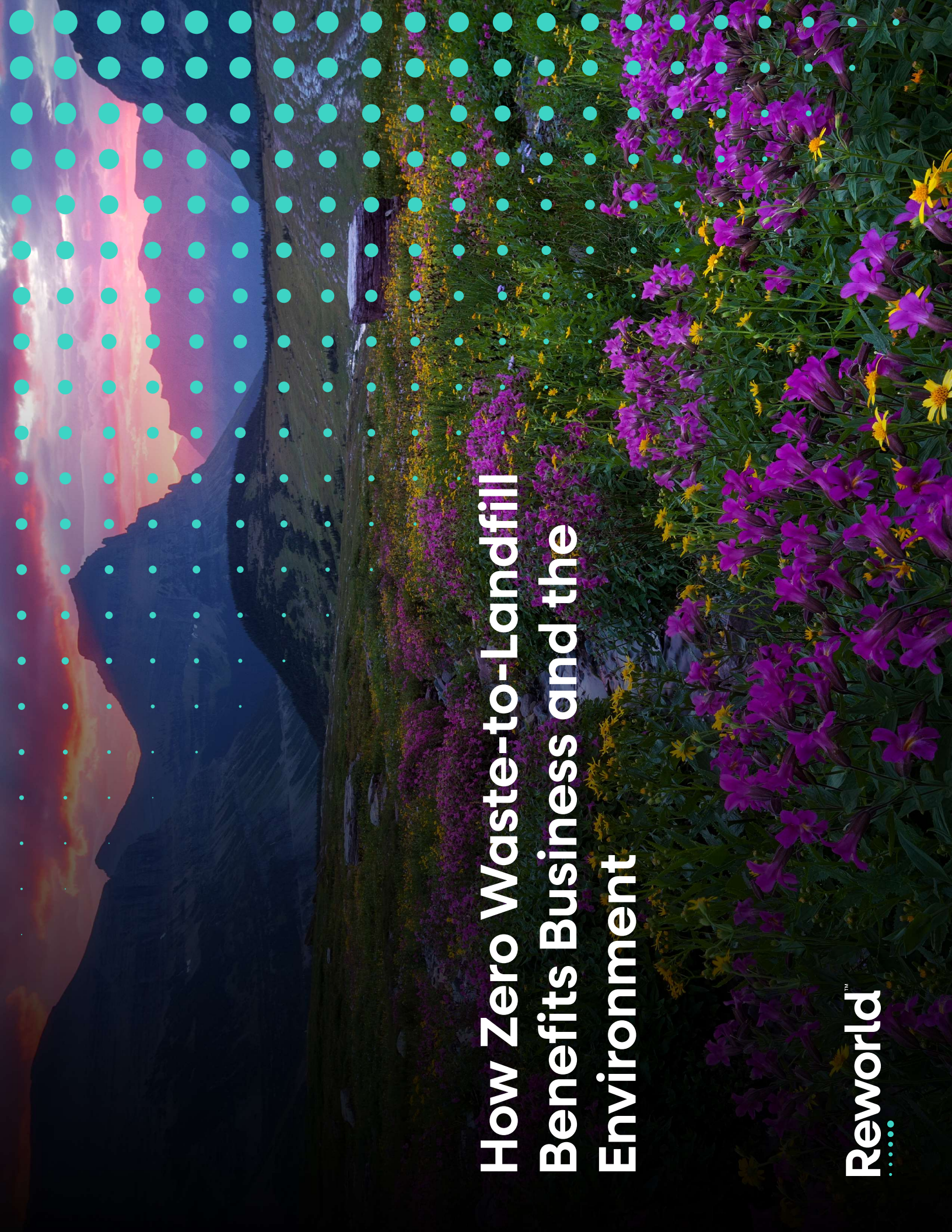




How Zero Waste-to-Landfill Benefits Business and the Environment

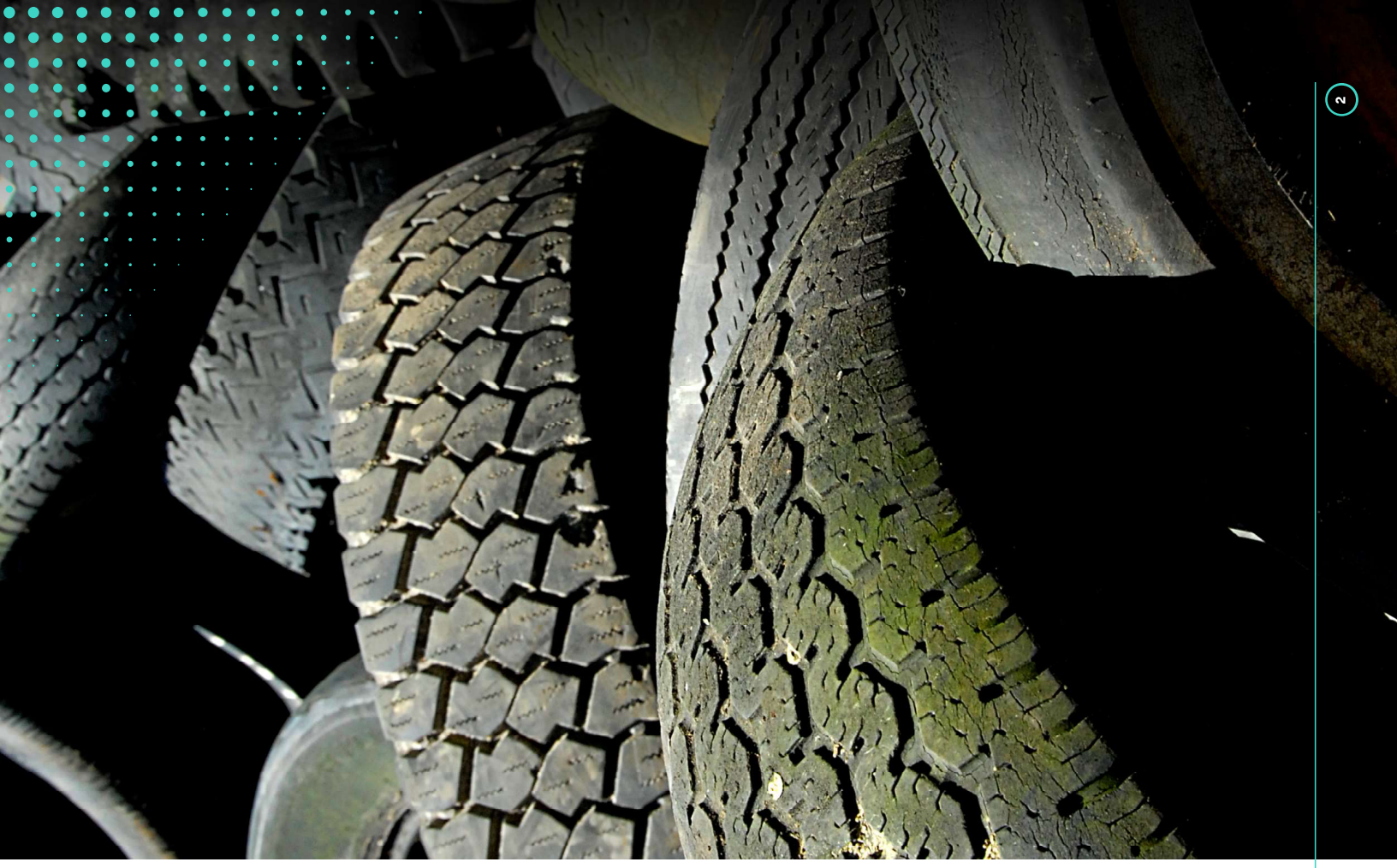
Reworld™

Companies commonly view waste management as a cost of doing business, but they probably don't realize—or haven't calculated—the true cost. Time, money and other tangible resources needed to haul away waste are only a fraction of the possible expenses when potential liabilities are considered.

As today's markets demand more sustainable practices due to the mounting impacts of climate change, investors, consumers and regulators are paying closer attention to commercial and industrial waste handling.

This global shift is driving companies to minimize waste generation; reuse and recycle the materials available to them; and reimagine the dynamics that delineate waste and resources, and the strategies that create the most value from them. As more business leaders recognize this changing tide and try to adapt, the need for smarter, more sustainable waste solutions that avoid landfill disposal and its inherent risks has never been more acute.

This guide shines a spotlight on an alternative approach to managing waste—zero waste-to-landfill—and its benefits to both businesses and communities through its diversion capabilities.



An aerial photograph of a landfill site. A dirt road curves through the center of the image, separating a large area of waste on the right from agricultural fields on the left. The waste is a mix of brown, grey, and blue-grey colors, indicating various types of debris. The surrounding fields are dark brown and green, showing signs of being recently plowed or planted. The sky is not visible, but the overall scene is a stark contrast between natural land and industrial waste disposal.

Identifying the Hidden Costs of Traditional Waste Disposal

Landfilling can seem cheap and easy. At first glance, it might seem to be one of the most inexpensive disposal methods per ton. However, a closer look reveals a plethora of hidden risks and costs.

Consumer goods company Unilever, for example, saves more than \$225 million in annual disposal costs by diverting its waste materials.

So, why are they able to save so much? What risk- and cost-generating considerations are they, and other leading businesses, accounting for by prioritizing zero waste-to-landfill strategies?



Key Financial Considerations



Long-Term Liability

One of the most common reasons businesses choose zero waste-to-landfill strategies is to reduce their exposure to risk.

Responsibility for waste sent to a landfill extends indefinitely, whether as a legal matter or in the court of public opinion. The uncertainty of the often-overlooked costs associated with potential landfill liability prompts many companies to stop sending their waste to landfills.



Resource Costs

When businesses pass on taking closer accounts of their waste streams, they pass on extracting more value from them.

By adopting zero waste-to-landfill strategies, companies could recover water, oil, plastics, metals and a number of other materials that can be reused, recycled or recovered from, avoiding resource excavation costs while creating new revenue opportunities through resources sales.



Customer Loss

A 2023 study by NYU Stern's Center for Sustainable Business Sustainable Market Share Index™ found that sustainability-marketed products were responsible for nearly a third of the growth in consumer packaged goods from 2013 to 2023.

This means that these products are a significant driver of growth in the industry, and failing to meet this growing demand could mean loss of customers and market share.



Key Environmental Considerations



Greenhouse Gas Emissions

Landfilling is a leading source of uncontrolled methane emissions, a prominent greenhouse gas that is 84 times more potent than CO₂ over a 20-year period.

Alarming, the next 20 years is a time window that many environmental experts consider to be an essential period for reducing greenhouse gases if we are to successfully avoid the worst impacts of climate change.



Soil and Water Contamination

Landfills leach toxic chemicals and other persistent organic pollutants, compromising soil and groundwater. This can affect the areas from which we harvest our food and procure our drinking water.

Non-biodegradable materials, such as plastics and hard foams, migrate, adversely impacting our streams, lakes and oceans.



Wildlife Habitat Destruction

Landfills and their waste infiltrate areas where wild animals would otherwise thrive.

Their construction and expansion often destroys food sources and long-established ecosystems. Operations disrupt nesting grounds and migratory routes. Pollutants frequently cause physical harm, sickness, premature death and lower birth rates.



Key Social Considerations



Community Endangerment

When waste ends up in a landfill, it doesn't always stay there.

When it does make its way back into communities, it can pose a number of health risks by exposing people to harmful bacteria and contaminants, dangerous chemicals and substances, or defective products and components.



Space Consumption

Without a sustainable alternative, the space allocated to landfills inexorably expands to satisfy the constant generation of waste.

This consumes land that otherwise would be used for more productive purposes, such as housing, office buildings, storefronts, recreation buildings, parks, wilderness sanctuaries or other spaces that could benefit the region.



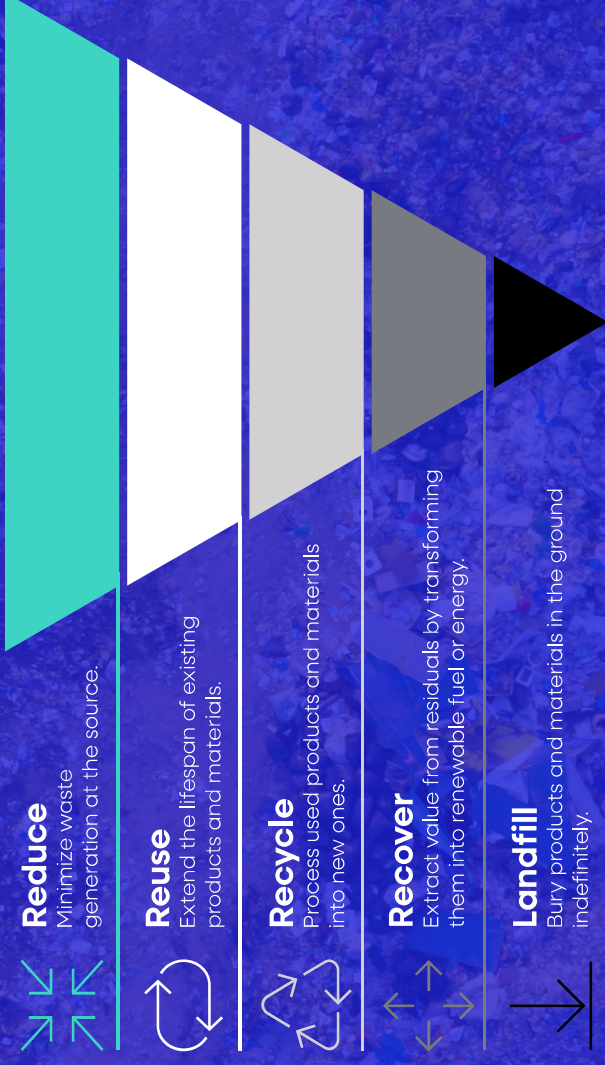
Unpleasant Living Conditions

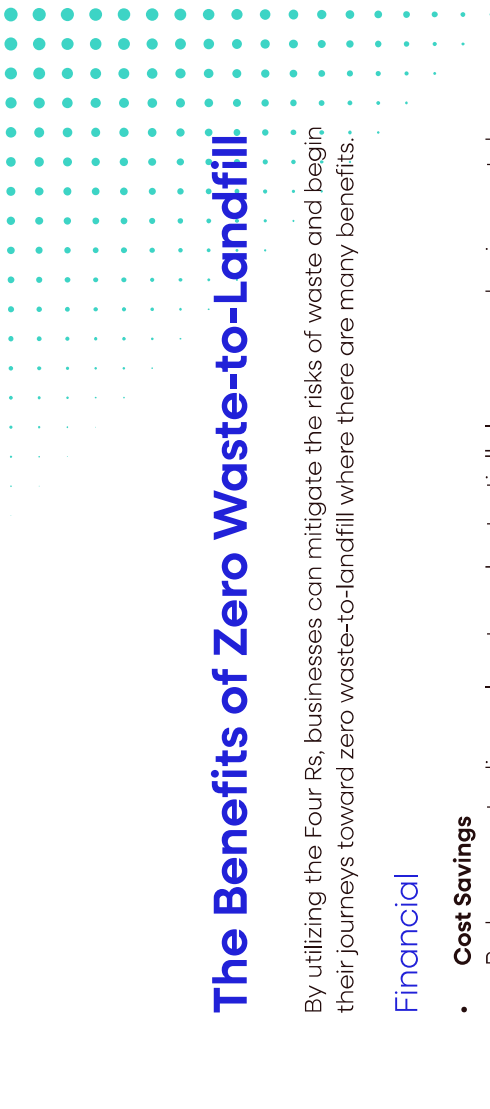
Landfills produce a lot of noise and odor pollution, which can be disruptive to those living nearby. Additionally, these types of spaces tend to attract a variety of pests, like rodents and insects.

In combination, these factors create unpleasant living conditions which ultimately decrease property values and can cascade into other local economic problems.

The Waste Hierarchy

Most business leaders have practices in place to manage waste with a goal of becoming more sustainable. It's not surprising to find companies deploying the Four Rs of the Waste Hierarchy—Reducing, Reusing, Recycling and Recovering from waste—to limit their environmental impact and optimize their resource use.





The Benefits of Zero Waste-to-Landfill

By utilizing the Four Rs, businesses can mitigate the risks of waste and begin their journeys toward zero waste-to-landfill where there are many benefits.

Financial

- **Cost Savings**
Reduces waste disposal costs and potentially lowers purchasing costs by reusing materials
- **Revenue Generation**
Creates new revenue streams through the sale of recyclable materials and byproducts
- **Operational Efficiency**
Streamlines processes, leading to more efficient use of resources and reduction in material costs
- **Innovation and Competitiveness**
Encourages innovation in product design and business practices, improving competitiveness

Environmental

- **Resource Conservation**
Reduces the need for raw materials by encouraging reuse and recycling, preserving natural resources
- **Pollution Reduction**
Minimizes air, water, and soil pollution caused by waste decomposition in landfills
- **Climate Change Mitigation**
Decreases greenhouse gas emissions, such as methane, which landfills are deemed super producers of
- **Ecosystem Protection**
Helps preserve biodiversity by reducing habitat disruption and destruction

Social

- **Brand Image and Reputation**
Enhances brand reputation and public image as a responsible and sustainable business
- **Customer Loyalty**
Attracts and retains customers who value sustainability and environmental responsibility
- **Employee Morale and Engagement**
Boosts employee morale and engagement by fostering a sense of pride and purpose in contributing to environmental sustainability
- **Community Relations**
Improves relations with the local community by reducing the municipal and environmental impacts of operations

Additional

- **Compliance and Risk Reduction**
Ensures compliance with waste management regulations and reduces the risk of fines and legal actions
- **Supply Chain Benefits**
Promotes sustainability throughout the supply chain, encouraging suppliers and partners to adopt similar practices
- **Market Differentiation**
Differentiates the business from competitors by demonstrating a commitment to sustainability
- **Investment Attraction**
Attracts investors who prioritize environmental, social, and governance (ESG) criteria



Making Zero Waste-to-Landfill a Reality

Once businesses have mastered the basics and made progress moving up the waste hierarchy, they'll need additional expertise that most don't have in-house to effectively reach zero waste-to-landfill and realize its benefits in tangible, long-lasting ways. They'll need to partner with sustainable solution providers who can make their goals a reality. But what are important qualities to look for in a partner?



Leadership in Strategic Sustainability

The right zero waste-to-landfill partner will help a business develop realistic, measurable goals; identify clear paths toward them; and effectively drive their pursuit through the implementation of sophisticated technologies and practices.



Comprehensive Expertise and Capabilities

The right zero waste-to-landfill partner will be an expert in managing every step and facet of a business's waste stream. They will offer a wide and scalable array of capabilities to meet the business's specific needs, as well as the needs of the surrounding community and the environment.



A History of Transparency and Reliability

The right zero waste-to-landfill partner will be fully transparent in their operations and reporting. They will have a reputation for reliable and responsible waste management services, strong community relationships, and proven environmental stewardship.



A Wide Network of Industry Relationships

The right zero waste-to-landfill partner will be part of a wide network of industry-leading experts, facilities and technologies. They will have ongoing relationships with commercial peers; local, state and federal regulatory bodies; as well as municipalities and community groups.





Taking the Next Step

Data continues to show that responsible waste management is not only good for the environment, but is good for business too, and pursuing zero waste-to-landfill is one of the best ways of achieving its highest levels.

Still, making the case for zero waste-to-landfill is far easier than reaching it.

While committing to the cause and embracing the waste hierarchy are essential first steps toward eliminating the costs and liabilities associated with landfilling waste, businesses must go one step further to see the greatest returns on value creation opportunities.

They must partner with a solutions provider that can meet the full extent of their needs and set them up for tangible, long-lasting success.