

What are the Benefits of Waste to Energy?

Waste-to-energy provides multiple benefits, including waste reduction, renewable energy generation, and greenhouse gas emissions mitigation. By diverting waste from landfills, WTE reduces emissions of methane, a potent greenhouse gas. It also provides a steady source of electricity or heat that can help offset reliance on fossil fuels, and in the case of Reworld™, generate Renewable Energy Certificates / Credits (RECs). Additionally, the thermomechanical treatment facilities that house most of the waste-to-energy technology throughout the United States & Canada are designed with advanced emission controls, metals recycling, and water reuse systems, among others, which collectively minimize environmental impact while maximizing value creation.

Maximizing value with renewable energy recovery solutions

Renewable energy recovery solutions are a great way to manage the final bits of waste materials that are unfit for recycling. They'll reduce your environmental footprint, protect your brand, and create value that will ultimately benefit your bottom line.

Powerful landfill diversion

Prevents post-recycled materials from being sent to landfills, where they would accumulate and force landfills to expand as waste continues to be produced.

A carbon-negative energy source

Renewable generation of steam and electricity that outperforms wind and solar when the avoided environmental impacts of waste are considered.

Innovative GHG mitigation

Avoids landfill-induced greenhouse gases and has highly stringent emission standards, ultimately preventing millions of tons of emissions from entering the atmosphere.

A shield against waste

Protects people and the planet by eliminating waste materials that could contaminate soils and waterways, harm communities or businesses, and adversely affect ecosystems.

Supports thorough recycling

Recovers and recycles metals and other resources that are too fine or complex for standard systems, including ash.

An asset to circularity

Synergizes with other solutions to reduce waste, uncover new sustainability opportunities, and close the loop on most supply chains.

TTF incineration: unlocking renewable energy credits

When accounting for the emissions avoided due to landfill diversion, renewable energy recovery is considered a rare source of carbon-negative energy.

As a result, this solution is an ideal partner to ReCredit, our sustainable carbon offsets that leverages Reworld™ technology to generate RECs that are 10x more impactful than those derived from wind or solar energy sources.

Methane as a greenhouse gas is 84x more potent than carbon dioxide over a 20-year period—a timeframe many experts consider pivotal in averting the worst impacts of climate change. Technologies like waste-to-energy are among the most impactful ways to reduce methane generation.