An Assessment of the U.S. Recycling System/Financial Estimates to Modernize Material Recovery Infrastructure: U.S. Environmental Protection Agency Report



Walter Wright, Jr.
wwright@mwlaw.com
(501) 688.8839

01/23/2025

The United States Environmental Protection Agency ("EPA") issued a report titled:

An Assessment of the U.S. Recycling System: Financial Estimates to Modernize Material Recovery Infrastructure ("Report").

See EPA 530-R-24-010.

EPA prepared the Report pursuant to a mandate in the fiscal year 2021 Congressional appropriations bill to:

…develop estimates of the infrastructure investment required to modernize the Material Recovery infrastructure…[and] develop estimates for the amounts of investment needed to provide all citizens with access to recycling services on par with access to disposal.

The Report provides:

- Estimates of the total infrastructure investment required to modernize recycling infrastructure.
- Improve consumer recycling education.
- Provide all residents with equivalent access to recycling services.

The Report cites a United States Government Accountability Office report published in 2020 identifying significant challenges in improving recycling. Such challenges include:

- Contamination of recyclables.
- Low recycling collection rates.
- Limited market demand for recycled materials.
- Low profitability for operating commercial recycling programs.
- Limited information to support decision-making about recycling.

The Report focuses on quantifying and assessing the level of investment needed to provide all residents access to recycling services on par with trash disposal. It utilizes the United States 2030 goal of 50% recycling as a framework to measure success of recycling investments.

The assessment specifically focuses on:

- Packaging and organic recyclable materials as the combined tonnages of these materials account for 82 percent of the municipal solid waste stream (MSW) and are described as essential targets in providing communities with access to recycling services on par with access to trash disposal.
- Proven, existing technologies to recycle these materials at a national level. This is stated to include mechanical technologies that process commonly-recycled materials (e.g., metals, plastics, paper, and glass) through Material Recovery Facilities (MRFs) and biological technologies that process organic materials (e.g., food waste and yard waste) as livestock feed and through composting and anaerobic digestion facilities.

The assessment's methodology to develop investment estimates included:

- Assessed the current stock of U.S. recycling infrastructure and identified associated gaps within the recycling system that must be addressed to modernize infrastructure and provide all residents with access to recycling services on par with access to trash disposal.
- Determined the level of investment needed to fill such gaps using secondary sources and a thorough literature review of 125 documents published between 2015 and 2021 that focus on key improvements and associated costs of improving the U.S. recycling system.
- Conducted a series of interviews with U.S. recycling system stakeholders and experts to verify research findings and refine cost estimates.

The Report concludes that an estimated total investment of $36 to $42 billion would improve curbside collection, drop-off, and processing infrastructure by 2030.

A copy of the Report can be downloaded here.