# New Jersey's Waste Management Strategies: Alternatives to Landfills

Authored by Dr. Nicholas J. Pirro

Pyrrhic Press Publishing |

www.pyrrhicpress.org

January 29, 2025

**Abstract** New Jersey has been actively implementing alternatives to traditional landfills through various waste management strategies, including waste-to-energy (WtE) facilities and comprehensive recycling programs. The state operates several WtE plants that convert municipal solid waste into energy, thereby reducing the volume of waste destined for landfills. This paper explores these initiatives, focusing on the Essex County Resource Recovery Facility and the Camden County Energy Recovery Center, along with legislative measures that support waste diversion. By analyzing these approaches, this research highlights New Jersey's commitment to sustainable waste management practices.

**Introduction** Waste management in New Jersey has evolved significantly in recent years, shifting away from traditional landfilling towards more sustainable alternatives. With growing concerns over landfill capacity, environmental degradation, and greenhouse gas emissions, the state has implemented waste-to-energy solutions and enhanced recycling programs. This paper examines how these efforts are reducing landfill dependency and paving the way for a more sustainable future.

# Waste-to-Energy (WtE) Facilities in New Jersey

- 1. Essex County Resource Recovery Facility
  - Located in Newark, this facility processes approximately 2,800 tons of waste daily and generates around 65 megawatts of power (Wikipedia, 2024). It significantly reduces the amount of waste sent to landfills while producing renewable energy.
- 2. Camden County Energy Recovery Center

 This facility processes over 400,000 tons of waste annually, serving 32 municipalities in the region (Reworld Waste, 2024). By converting waste into energy, it provides an environmentally friendly alternative to traditional landfill disposal.

## **Recycling and Legislative Measures**

## 1. Statewide Recycling Mandates

 New Jersey mandates recycling programs across its counties, ensuring residents and businesses participate in waste segregation and material recovery efforts (NJ.gov, 2024). These programs help minimize waste sent to landfills and promote a circular economy.

### 2. Future Recycling Goals

 Proposed legislation aims to make all packaging materials recyclable or compostable by 2034, with a goal to reduce single-use packaging by 25% by 2032 and achieve a 65% recycling rate by 2036 (APNews, 2024). Such measures will further reduce landfill dependency and encourage sustainable packaging practices.

## The Impact of New Jersey's Waste Management Policies

#### 1. Reduction in Landfill Waste

 The integration of WtE and recycling initiatives has led to a significant decline in landfill usage, improving environmental quality and reducing methane emissions.

#### 2. Economic and Environmental Benefits

 These initiatives not only create economic opportunities in the renewable energy and recycling sectors but also contribute to sustainability by reducing greenhouse gas emissions and conserving land resources.

**Conclusion** New Jersey has demonstrated strong leadership in waste management by adopting waste-to-energy solutions and implementing progressive recycling policies. These initiatives showcase how states can transition away from landfill dependency toward more sustainable waste management practices. Future efforts should focus on expanding these programs and integrating new technologies to further enhance waste diversion and energy recovery.

#### References

 APNews. (2024). New Jersey's recycling and waste reduction goals. Retrieved from https://apnews.com/

- NJ.gov. (2024). Statewide recycling initiatives and policies. Retrieved from https://www.nj.gov/dep/dshw/recycling/
- Reworld Waste. (2024). Camden County Energy Recovery Center. Retrieved from https://www.reworldwaste.com/where-we-are/facilities/camden
- Wikipedia. (2024). Essex County Resource Recovery Facility. Retrieved from https://en.wikipedia.org/wiki/Essex\_County\_Resource\_Recovery\_Facility