



EcoCycle

WASTE INTELLIGENCE FOR REAL ESTATE

Waste Intelligence for Real Estate

Transforming Waste into Actionable Sustainability Data

JLL Hackathon 2026



Agenda



01 The Challenge

- 1.1 Waste Visibility Gap
- 1.2 ESG & Carbon Reporting Challenges

02 The Solution

- 2.1 Introducing EcoCycle
- 2.2 AI-powered Waste Intelligence
- 2.3 Agentic AI Architecture

03 Intelligent Operations

- 3.1 From Insight to Action
- 3.2 JLL Ecosystem Integration
- 3.3 Demo Walkthrough

04 Business Impact

- 4.1 Business Value for JLL
 - 4.2 Roadmap to 2030
-

*We are building **EcoCycle** to solve the lack of measurable waste intelligence in residential real estate for property managers and sustainability teams so they can improve recycling performance, strengthen ESG reporting, and make better decarbonization decisions.*

The Challenge: Waste Visibility Gap



Property Managers Lack Visibility

- Waste is often tracked through invoices and collection reports.
- Limited insight into waste composition and contamination.
- Difficult to identify opportunities for improvement.



Sustainability Teams Lack Actionable Data

- Waste data is often estimated rather than measured.
- Limited connection between waste and carbon reporting.
- Challenges in benchmarking and tracking progress across assets.

Why This Matters?



- Limited waste intelligence
 - No material-level insights
 - Lack of contamination tracking
- Waste often estimated
 - Limited auditability
 - Difficult carbon attribution
- Missing waste-related insights
 - Limited support for decision-making
 - Lost opportunities for carbon reduction



Target outcomes



Operational Waste Intelligence

Transform waste data into measurable insights.



Improved Recycling Performance

Reduce contamination and increase diversion rates.



Enhanced ESG Reporting

Provide accurate and auditable waste metrics.



Portfolio Benchmarking

Compare performance across assets.



Waste-to-Carbon Insights

Connect waste data with sustainability goals.



Support Net Zero

Enable smarter decarbonization decisions.



EcoCycle

WASTE INTELLIGENCE FOR REAL ESTATE

Every building already generates waste.

EcoCycle makes it measurable, actionable, and valuable.

Introducing **EcoCycle**



WHAT IT IS		HOW IT WORKS		VALUE CREATED	
	AI-powered platform for measuring and understanding waste performance.		Captures waste activity at the point of disposal using computer vision technology.		Provides visibility into waste streams that are traditionally unmeasured.
	Converts waste activity into actionable environmental insights.		Waste data is transformed into measurable sustainability metrics.		Supports recycling improvement, contamination reduction, and ESG performance tracking.
	Built for deployment across residential and mixed-use portfolios.		Uses a modular architecture that can scale across multiple assets.		Creates a foundation for portfolio-wide sustainability intelligence.

EcoCycle transforms everyday waste disposal into measurable sustainability intelligence, helping property teams make smarter environmental decisions.

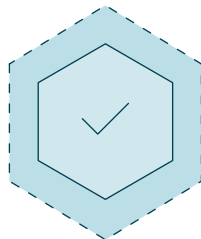
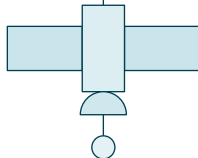
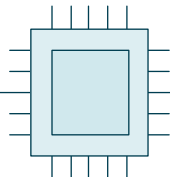


How Ecocycle Works?

Step-by-step journey from Disposal to Sustainability Intelligence



Agentic AI Architecture



EcoCycle: An Autonomous Sustainability AI Agent

Observe

Detects and classifies waste using Computer Vision.

Reason

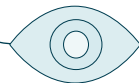
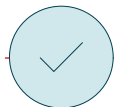
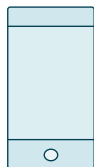
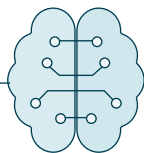
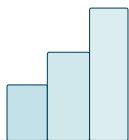
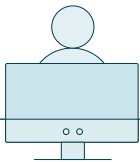
Analyses contamination, recycling potential and carbon impact.

Act

Recommends actions and alerts property teams.

Learn

Continuously improves using portfolio-wide operational data.





Turning Waste Data into Portfolio Intelligence

1

Building Operations

- Energy Consumption
- Water Usage
- Building Access Systems
- Waste Collection Activities



2

EcoCycle

- Material Recognition
- Waste Analytics
- Contamination Detection
- Carbon Impact Calculations



3

Canopy

- ESG Reporting Portfolio
- Benchmarking Sustainability Dashboards
- Performance Tracking



4

Carbon Pathfinder

- Carbon Scenario Modelling
- Decarbonization Planning
- Asset Prioritization
- Investment Decisions



5

Portfolio Impact

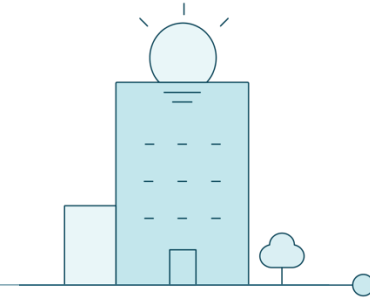
- Improved Recycling Performance
- Enhanced ESG Reporting
- Better Carbon Visibility
- Supports Net Zero Goals



Business Value for JLL



Creating Value Beyond Waste Management



New Revenue

Premium Waste Intelligence services.



Operational Efficiency

Automated insights and reduced contamination.



Client Value

Stronger ESG performance and retention.



Portfolio Intelligence

Scalable insights across managed assets.

Transforming waste into a strategic business asset.

Roadmap



2026: Pilot

Deploy EcoCycle across residential communities.



2027: Expand

Portfolio-wide ESG reporting and benchmarking.



2030: Scale

Autonomous sustainability across JLL-managed portfolios.



2028: Integrate

Connect with Canopy and Carbon Pathfinder.

→ ***Supporting JLL's Accelerate 2030 vision.***

Thank you

