

# AI-Driven Waste Management Optimisation Platform

## AI-powered optimisation for waste collection, processing and disposal

Real-time routing, forecasting and analytics to cut costs and emissions

### Lower collection costs

Reduce waste collection costs by up to 30% through optimised routes and smarter scheduling.

### Reduced carbon emissions

Decrease emissions by minimising mileage and idling via AI-optimised routing.

### Operational efficiency

Improve service efficiency with data-driven decisions, automation and real-time monitoring.

## Transform Public Services

- Delivers measurable cost savings (up to 30% reduction in collection costs) for public sector waste operations.
- Improves environmental performance by cutting carbon emissions through smarter routing and planning.
- Provides end-to-end visibility with interactive analytics dashboards and mobile-enabled field operations.
- Enhances service quality and reliability via predictive scheduling, contamination alerts and IoT monitoring.

# Service Overview

This AI-powered platform transforms waste operations by optimising collection routes, monitoring containers in real time and forecasting demand across waste streams. It reduces operational costs while improving service efficiency, environmental performance and oversight for public sector waste services.

## Core Capabilities

- AI-driven route optimisation and planning for waste collection rounds
- Predictive analytics and demand forecasting for waste generation and resource planning
- IoT-enabled bin monitoring with real-time contamination and fill-level alerts

# Key Features

Real-time waste collection route optimisation and planning

Predictive analytics for waste generation patterns and trends

IoT sensor integration for automated bin monitoring

AI-powered demand forecasting for resource allocation

Automated scheduling and dynamic resource allocation system

Interactive dashboard with comprehensive waste analytics

Contamination detection and real-time alert system

Mobile application for field operations and reporting

# Service Benefits

**Lower collection costs**

Reduce waste collection costs by up to 30% through optimised routes and smarter scheduling.

**Reduced carbon emissions**

Decrease emissions by minimising mileage and idling via AI-optimised routing.

**Operational efficiency**

Improve service efficiency with data-driven decisions, automation and real-time monitoring.

**Higher recycling performance**

Increase recycling rates through better monitoring, contamination detection and targeted interventions.

**Improved reliability and visibility**

Minimise missed collections, enhance visibility across all waste streams and streamline reporting for regulatory compliance.

# Summary & Key Advantages

## Why Choose This Service

- Delivers measurable cost savings (up to 30% reduction in collection costs) for public sector waste operations.
- Improves environmental performance by cutting carbon emissions through smarter routing and planning.
- Provides end-to-end visibility with interactive analytics dashboards and mobile-enabled field operations.
- Enhances service quality and reliability via predictive scheduling, contamination alerts and IoT monitoring.
- Supports compliance and governance with streamlined reporting and robust, secure cloud deployment across major providers.
- Designed to integrate with existing systems via API and run in multi-cloud environments (AWS, Azure, GCP).

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