



→ **Kevin Harvey**
Principal & North American
Operations Manager Waste Services

Business Case for Smarter Waste Management

Welcome

Agenda

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- ➔ Why Rethink Waste Management?
- ➔ The Hidden Costs of Inefficiency
- ➔ Data as a Competitive Advantage
- ➔ Our Approach – Data Driven & Local Solutions
- ➔ Client Success Stories
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Kevin Harvey, Principal
NA Operations Manager - Waste Services
GHD Services Inc.



SCAN ME

GHD provides data driven waste management solutions that enable clients and internal project delivery teams to optimize workflow with an eye towards sustainability, while ensuring compliance and minimizing risks.

About → US

GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings and transportation.

In extraordinary and challenging times, we are thankful for the things that make us strong.

We provide engineering, architecture, environmental and construction services to private and public sector clients.



The cornerstone of GHD's business is our client service-led culture and connected global network.

Established in

1928

and privately owned by our people, GHD employs

+12k

people across five continents and the Pacific region.

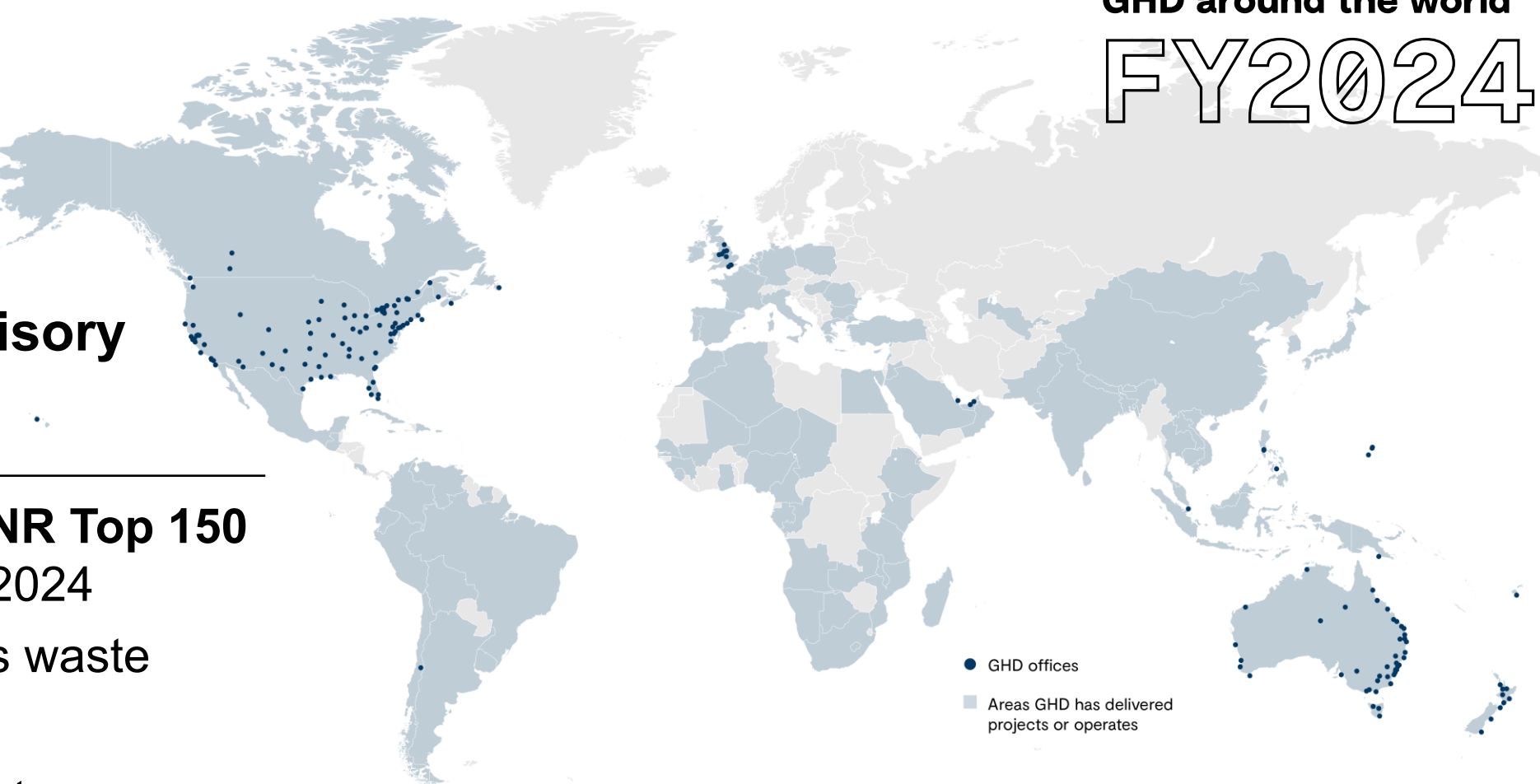


GHD around the world
FY2024

Engineering,
environmental,
construction, advisory
& digital services

We rank **#29** in the **ENR Top 150**
Global Design Firms 2024

- **#05** in hazardous waste
- **#08** in water
- **#06** in sewer/waste



96+
years in operation

1.9[®]B
USD revenue 2024

45+
service lines

160+
offices worldwide

12[®]K
people

135+
countries served

1
connected
global network

Why Rethink Waste Management?

Waste management has traditionally been viewed as a cost center, tied to compliance and risk mitigation. This reactive model is increasingly unsustainable in a data-driven, ESG-focused business environment.

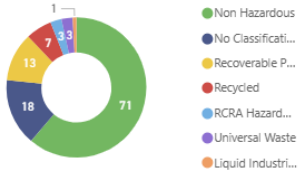
Modern organizations are rethinking waste as a strategic function - leveraging digital tools and centralized data to uncover inefficiencies, reduce costs, and improve environmental performance.

- **Hidden Costs:** Dispersed systems and manual tracking lead to misclassification, overpayments, and compliance gaps.
- **Digital Advantage:** Tools like GHD Navigator™ provide real-time visibility across sites - enabling accurate classification, reporting, and benchmarking.
- **Strategic Outcomes:** Supports ESG reporting, resource recovery, emissions tracking, and circular economy initiatives.

By shifting from legacy practices to data-driven solutions, organizations can unlock operational resilience, stakeholder trust, and long-term value.

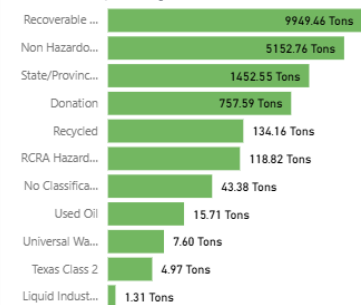
Waste Stream Classifications in Progress

Note: This visual is not associated with Date selection

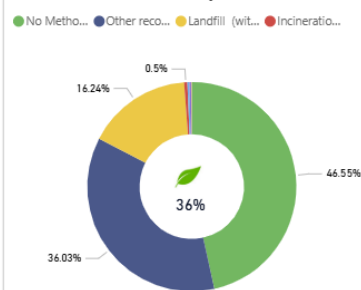


Shipments by Waste Stream Classification

Note: This visual represents logarithmic scale

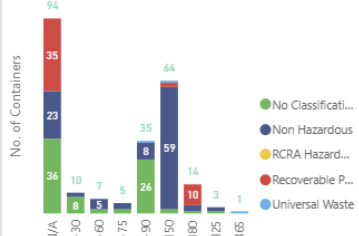


Sustainability Profile

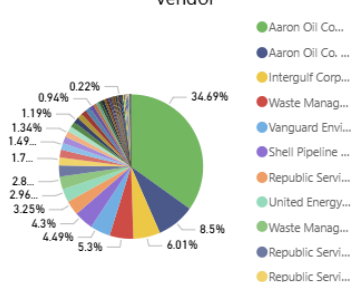


Onsite Storage Summary

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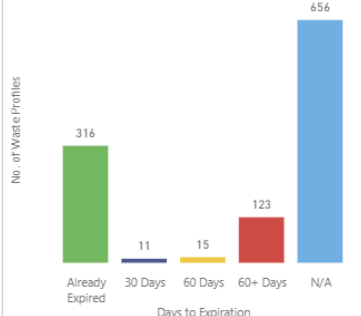


Waste Tons (%) Disposed/Received by Vendor



Profile Expirations

Note: This visual is not associated with Date selection



The Hidden Costs of Inefficiency

Inefficient waste management quietly erodes profitability and increases exposure to risk. These costs are often buried in legacy systems and siloed processes, making them hard to detect - but their impact is significant.

- **Disorganized Data:** Fragmented tracking leads to compliance gaps, inaccurate reporting, and missed ESG targets and reporting deadlines.
- **Misclassified Waste:** Improper handling and inflated disposal fees result from improper classification and manual processes.
- **Lost Recovery Opportunities:** Recyclables and reusable materials are discarded, forfeiting cost savings and circular value.
- **Operational Blind Spots:** Without centralized data, organizations struggle to benchmark performance or identify inefficiencies.



Data as a Competitive Advantage

Proactive Shift: Data moves waste management from reactive compliance to strategic action.

Integrated Solutions: GHD's waste experts + GHD Navigator™ = real-time, enterprise-wide visibility.

Informed Decisions: Visibility to data can drive best practices, uncover recycling/recovery opportunities, and support quick decisions.

Operational Gains: Enhanced classification, tailored dashboards, and vendor accountability.

ESG Impact: Reliable data supports governance, goal-setting, and stakeholder trust.





Our Approach – Data Driven & Local Solutions

Grassroots data collection: Conducted site visits and interviews to gather waste info, then enter this information into a centralized system i.e., GHD Navigator™.

Location-based strategy: Built relationships with local vendors to service remote sites, tailoring solutions to community capabilities.

Digital coordination: Used Navigator™ to map sites, identify compliant vendors nearby, and track all waste from “cradle-to-grave”.

Proactive management: Combined local insights + real-time data to address issues quickly and adapt to each site’s needs.

Major Oil & Gas Client Success Story



In 2010, a major oil & gas company was facing rising costs and internal disorganization in its waste management operations, resulting in regulatory compliance issues across their US Midstream operations.

To address this, **GHD** developed a tailored waste disposal and compliance program that:

- Consolidated multiple vendors into a **single point of contact**.
- Streamlined operations and reduced inefficiencies.
- Delivered cost savings of **~\$8 million**.

The implementation of GHD's **Integrated Waste Services Solution** further improved logistical processes, enhancing overall efficiency.

As the client advances its sustainability goals, GHD continues to support by:

- Setting **realistic waste reduction targets**.
- Advising on **global waste programs**, including Treatment, Storage, and Disposal Facility (TSDF) Audits.

Midstream Oil and Gas Client Success Story



In 2021, a midstream oil and gas company lacked a standardized corporate waste management program, resulting in poor visibility into waste data. This led to inconsistent site-level practices and unmet regulatory record-keeping requirements, hindering progress toward their zero-waste initiatives.

GHD implemented an integrated digital waste tracking solution that:

- Enabled **real-time tracking and reporting**.
- Delivered data through an **intuitive dashboard**.

GHD continues to support the client through the integrated solution, which has led to:

- Capture of more detailed waste information.
- Improved cost tracking.
- Enhanced risk management and regulatory compliance.
- Measurable progress toward **zero-waste goals**.

Class 1 Railroad Client Success Story



In 2017, a major US Class 1 Railroad client engaged GHD to review their California hazardous waste reporting requirements. Our client's data was fragmented and not consolidated in one single location or format. GHD compiled the information into a standardized format and completed a data driven review of the information. GHD discovered that the client overpaid California's hazardous waste fees by ~\$435K.

GHD helped the client implement an enterprise-wide waste and compliance program utilizing GHD Navigator™ to manage and track all waste shipments.

GHD implemented an integrated digital waste tracking solution that:

- Enabled **real-time tracking and reporting**.
- Delivered data through an **intuitive dashboard**.

GHD continues to support the client through the integrated solution, which has led to:

- Compliance reporting assurance
- Development of a waste reduction and sustainability strategy
- **Cost savings approaching \$900K**

Steps to Smarter Waste Management

- 1 Centralize Waste Data:** Consolidate fragmented systems into a unified platform for waste tracking, generation, transport, and disposal.
- 2 Digitize & Automate:** Replace manual processes with real-time tools like GHD Navigator™ to improve accuracy and reduce risk.
- 3 Analyze & Benchmark:** Use analytics to identify inefficiencies, misclassification, and performance gaps across sites.
- 4 Optimize & Recover:** Implement recycling, reuse, and beneficial recovery programs to reduce disposal costs and emissions.
- 5 Align with ESG Goals:** Integrate waste data into ESG reporting frameworks to support transparency and stakeholder trust.
- 6 Lead with Purpose:** Shift from reactive compliance to proactive strategy - unlocking long-term value and a competitive advantage.



*** Thank you**