

CASE STUDY

THE DEPARTMENT OF WATER AND ENVIRONMENTAL REGULATION

A centralised, digital platform
for managing the state's waste
data reporting



A centralised, digital platform for managing the State's waste data reporting as per state legislation.

The Department of Water and Environmental Regulation supports Western Australia's community, economy and environment by managing and regulating the state's environment and water resources. Underpinning their goal to better serve the industry and developers, the department aims to deliver online digital experiences to streamline and simplify regulation.

Amendments to the 'Waste Avoidance and Resource Recovery Regulations 2008' (WARR Regulations), required the department to put in place a solution for 'liable persons' to report waste and recycling data, effective 1st July 2020, in accordance with approved procedures. All Local Government organisations, waste disposers, and recyclers are required to be compliant with the WARR Regulations.

Digitalising and automating waste reporting across the state

Waste data reporting was previously conducted by the WA state in an ad-hoc fashion, through the manual processing of spreadsheets, back-end databases and unstructured communication, such as email.

Under the new regulation, the department required a robust stakeholder engagement platform for liable persons, such as local and regional governments, recyclers and nonmetropolitan landfills to make and lodge waste returns in an approved form; publishing information and procedures to be followed; and requiring stakeholders to keep records for at least five years.

To streamline and simplify the ability for stakeholders to adhere to the regulatory requirements, the department looked to centralise the management and submission of end-to-end waste reporting through a full digital, automated platform.



Western Australia Government's 2030 strategy for Waste Avoidance and Resource Recovery aims to make WA become a sustainable, low waste, circular economy in which human health and the environment are protected from the impacts of waste.

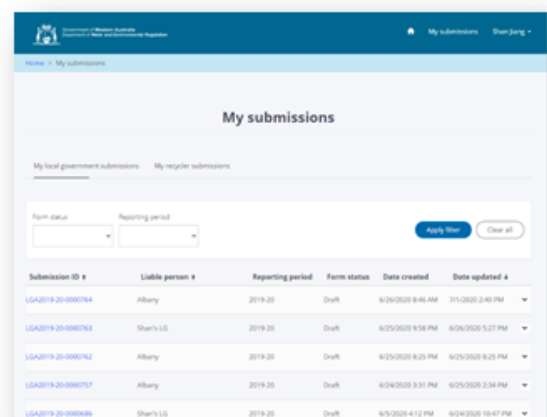
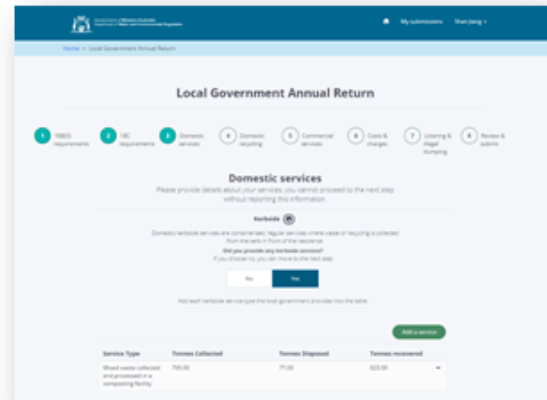
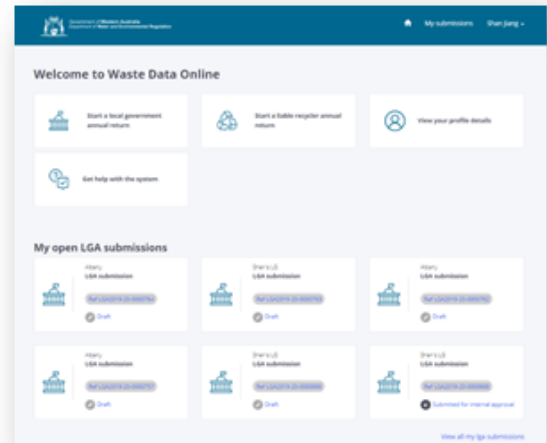
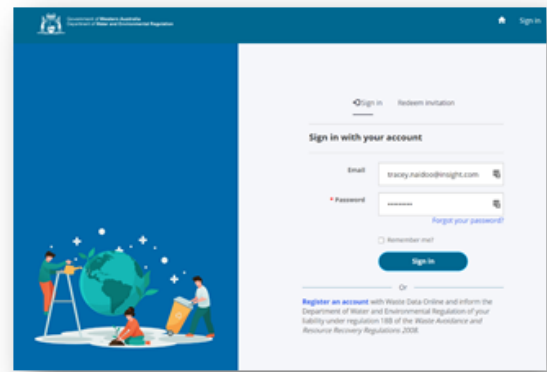
Key targets for 2030:

- **20% reduction** in waste generation per capita
- Increase **material recovery by 75%**
- No more than **15% of waste generated** in Perth and Peel regions is landfilled
- All waste is managed and/or disposed to **better practice facilities**

User-centric experience for a digital engagement and data collection platform. Insight partnered with the department's key stakeholders to ideate and transform the manual processing practices to a digital platform, focused on a great user experience.

The 'Waste Data Online' solution leverages the powerful capabilities of Dynamics 365 for the back-end intelligent data processing and workflow automation, integrated with a front-end PowerApps portal providing a clean interface for users to register, lodge and review submissions.

Today, Waste Data Online provides the collection processes for three different reporting needs and is the Government approved end-to-end engagement process for 'liable persons' to make and lodge annual reporting of waste collection, landfill and recycling data from various organisations across the state. The structured data collection is now easily consumable by the Department to keep track of volumes of waste and leveraged for analysis and environmental strategy planning.



Insight's Technical Leadership and DevOps approach to development

As the trusted advisor to the Department, Insight was able to deliver the solution during the COVID lock-down period, within the 3-month deadline to meet the new legislative requirements.

This was achieved through leveraging a best-practice approach of DevOps delivery with Continuous Integration / Continuous Delivery (CI/CD) pipelines to accelerate the development lifecycle.

Veli-Matti Vanamo, Chief Technology Officer (APAC) at Insight explains; "Waste Data Online is a prime example of how leveraging technology to streamline core organisational processes can provide tangible and positive outcomes in achieving sustainability targets. Insight is thrilled with the impact that the platform continues to have on Western Australia's sustainability goals".

Insight's blended team approach in working with the Department, helped to demonstrate technical leadership of Microsoft technologies with a strong user-experience focus, providing knowledge transfer at all stages of the project. This provided the Department's in-house IT team the confidence to manage the solution in the cloud, rather than an on-premises solution based on their existing Dynamics environment.

The road ahead

The department is now well on its way to support greater digital process automation and improved stakeholder engagement to streamline and simplify adherence to state regulations.

