

matter.

Smart Waste Optimisation with ThinkOS

CASE STUDY 2025



PORT STEPHENS
COUNCIL

About Port Stephens

Port Stephens has just been crowned Wotif's 2025 Aussie Town of the Year!

This region in NSW, is known for its pristine beaches, marine wildlife, and tourism appeal.

As one of Australia's most visited destinations, it attracts thousands of visitors each week—especially during peak holiday periods—placing high demand on public infrastructure and waste services.



Challenge

Helping keep the beaches clean, inviting, and as beautiful as ever for locals and visitors alike is a challenge. Port Stephens needed to improve the efficiency and responsiveness of their public waste collection services—particularly during the peak visitor periods—while managing costs and reducing public complaints.



Think Lid



ThinkOS

Solution

Port Stephens deployed Matter's new **ThinkOS smart waste platform** across high-traffic public spaces. The **Think Lid** is the world's first truly integrated sensing lid.

The system provided real-time bin fill data, usage trends, and actionable insights for optimising collection services.

12 Key Outcomes

Service Optimisation

- Increased collection frequency in high-demand zones (from 3x to 4x per week)
- Real-time bin usage identified morning fill surges (e.g. 7am–10am capacity), allowing pre-emptive bin placement
- Identified overserved areas—reducing unnecessary pickups

Financial Impact

- \$25,000/year per weekly collection added across ~100 bins
- Improved cost planning and contractor negotiation for Council's \$25M waste contract

Community Benefits

- **Zero complaints** during Christmas/New Year peak (compared to previous years)
- Improved accessibility and cleanliness with enhanced Think Lid design
- Reduced wind-blown litter due to heavier lid weight

System Performance

- High-volume reporting exceeded expectations
- Mobility of ThinkLids allowed flexible data collection across different sites
- Temporary installation using VHB tape performed reliably
- Council branding via stickers integrated seamlessly with the sensors

What's Next

- High-level performance report due to Council Executive
 - Seasonal data-driven promotional campaign post-winter
 - Continued collaboration with Matter to explore domestic waste insights from public bins
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Practical Outcomes

The City of Port Stephens' ThinkOS trial has delivered measurable improvements in:

- Service delivery
- Cost efficiency
- Community satisfaction

By leveraging real-time insights, the City is better equipped to make data-informed decisions that align with both fiscal goals and public expectations—and improving service for all.

