Industrial Packaging: From Waste to Value

68% Packaging Recovery
144.5t Saved from Disposal



Fabrizio Sacchi
Environmental Unit Manager

Which SPP thematic track does your case study align with? *Planet*

Where does your case study sit within the procurement lifecycle? Steward Assets – extending packaging value through circular initiatives.

What was the core challenge you were facing, and what was the context? Our company is an Italian pharmaceutical CDMO supplying active pharmaceutical ingredients (APIs) worldwide. Metal and plastic drums in which purchased raw materials and intermediates were supplied had traditionally been disposed of after use because they had been in contact with hazardous substances. This resulted in more than 200 tonnes of industrial packaging requiring end-of-life management every year. The objective was to develop a compliant circular solution capable of reducing waste while fully respecting safety requirements.

What approach did you take to tackle the challenge? Environmental Unit identified and qualified a specialized external supplier capable of collecting, washing and decontaminating drums that had contained hazardous substances. Instead of disposing of the packaging, the supplier restores it so it can be safely placed back on the market for reuse in other industrial sectors. Environmental Unit coordinated the supplier selection and implementation, while EHS and Operations supported the initiative to ensure compliance with applicable regulations and internal procedures. Rather than treating packaging as disposable, the initiative introduced an asset stewardship approach that maximised material value beyond its first use and transformed waste management into a circular procurement opportunity.

Who was involved and how did you build buy-in (or not)? Environmental Unit led the initiative by bringing together EHS, Operations and a specialised recovery partner around a common objective: replacing a disposal mindset with an asset stewardship approach. Internal support was built by demonstrating that the solution complied with regulatory requirements because the recovered drums were redirected to other industrial sectors after certified decontamination. Presenting the initiative as a practical circular economy solution helped secure stakeholder commitment.

What was the outcome, and how did you measure the impact?
The programme evolved over several years as Environmental Unit worked with a specialized recovery partner to progressively expand the scope of packaging suitable for recovery. Recovery rates fluctuated during implementation (49% in 2023 and 46% in 2024), but continuous process improvements enabled a significant step change in 2025. During the year, 144.5 tonnes of metal and plastic drums were recovered and prepared for reuse in other industrial sectors, while only 68.6 tonnes required incineration. As a result, 67.8% of all empty industrial drums leaving the site were successfully diverted from disposal. Performance was measured by tracking the proportion of packaging recovered versus total packaging generated. The initiative also reduced demand for virgin packaging in the market and demonstrated that circular economy principles can be applied even within regulated operations.

This is a community-sourced case study
Entry date: October 2026
Please note: The Guide has benefited from the input of individuals, companies, and organizations.
The views expressed in the Guide are not necessarily those of the Sustainable Procurement Pledge. SPP accepts no liability for content.

Industrial Packaging: From Waste to Value

What was the cost or investment required, and what have been the expected (or unexpected) business trade-offs or benefits? The initiative required limited capital investment. The main effort involved identifying the right recovery partner, redesigning the packaging end-of-life process and coordinating implementation across functions. Although the transition required additional effort and supplier qualification, the project transformed more than 144 tonnes of industrial packaging from waste into a valuable resource for other industries, significantly reducing disposal volumes while strengthening the company's circular procurement strategy.

What were the key success factors? The project's success was built on the Environmental Unit's commitment to rethinking traditional linear practices and fostering a strong partnership to enable effective material recovery. Rather than treating the initiative as a one-off waste reduction project, the team continuously improved the process, progressively increasing the proportion of packaging suitable for recovery. Most importantly, the organisation shifted its perspective: industrial packaging was no longer viewed as waste but as an asset whose value could be preserved beyond the pharmaceutical supply chain. This mindset enabled a scalable and lasting circular solution.

What was the "ugly truth" you encountered & what would you do differently next time? The greatest challenge was cultural rather than technical. In a highly regulated environment, packaging that has contained hazardous substances is often automatically considered waste, making alternative solutions difficult to accept. The programme also showed that circular transformation is not always linear: recovery rates did not improve every year, highlighting the importance of persistence, continuous optimisation and long-term supplier collaboration. Looking back, we would embed recovery mindset earlier and assess circular recovery opportunities as part of procurement strategy from the outset.

How would you recommend those with fewer resources approach this? *Start with one packaging stream and challenge the assumption that disposal is the only option. Partner with an experienced recovery specialist rather than developing in-house capabilities and monitor simple KPIs such as recovery rate and tonnes diverted from disposal. Early measurable results will help build internal support and justify scaling the initiative. Circular procurement starts with asking different sourcing questions rather than making large investments.*

For whom would you recommend this initiative? This initiative is relevant for pharmaceutical, chemical and other regulated manufacturing companies that generate significant volumes of industrial packaging. It is particularly valuable for organisations seeking practical circular economy solutions that can be implemented through procurement without changing core manufacturing processes. The approach is especially suitable for Procurement, EHS, Supply Chain and Sustainability teams looking to reduce waste, extend asset value and strengthen circular procurement practices.