

RAFICYCLE™ BY UPM RAFLATAC



2023 SUSTAINABLE PACKAGING DESIGN OF THE YEAR - LABELLING SILVER WINNER



RafCycle™ by UPM Raflatac



Key Outcomes and Measurement

- Reprocesses into paper & glassine liners
- Pulp can be used 7 times
- Incorporates recycled content
- Industrial recycling program
- Collection program for recycling glassine paper

Sustainable Packaging Guidelines



Design for Recovery



Optimise Material Efficiency



Design to Reduce Product Waste



Use of Renewable Materials

UPMRAFLATAC



Product: RafCycle
Company: UPM Raflatac
Country: Australia

UPM Raflatac is a global supplier of innovative and sustainable self-adhesive paper and film products. They help brands, designers and printers from around the world find labels that bring their packaging designs to life and drive brand value. Labels are everywhere and on everything we consume. Wrapped around food, beverages, cosmetics and medicines. Labels build brands, convey important information and tell stories.

UPM Raflatac is leading in sustainable labelling through their innovative self-adhesive label materials and services. Sustainable packaging is one solution to current global challenges. Even though labels are a small part of the packaging, they play a role in keeping their environmental footprint as little as possible and in enhancing recyclability. Together through action, UPM Raflatac can move the needle towards a more circular world of labelling and packaging by: Innovative labelling materials that ensure your packaging is environmentally sustainable; Sustainable solutions that enable you to reach beyond targets to Reduce, Recycle and Renew; Services that help you optimise your labels for a smarter future beyond fossils.

COORDINATED BY



ANZ REGIONAL AWARDS PROGRAM



INTERNATIONALLY ENDORSED BY



EXCLUSIVE ENTRY TO



- ✓ **Well-planned and executed collaboration between companies enables efficient use of raw materials and waste being recycled instead of landfilled.**
- ✓ **Glassine paper release liners can be de-siliconised, a key aspect of the recovery process, allowing it to be recycled into pulp and paper.**
- ✓ **UPM Raflatac can utilise their extensive collection network to facilitate cost-effective release liner recycling.**
- ✓ **UPM Raflatac offers solutions where the recycled materials are used for new paper products.**
- ✓ **Reducing the pressure on forests.**
- ✓ **A brand owner that recycles approximately 100 tonnes of paper release liner per year - yields 75 tonnes of pulp made from paper liner waste - this can then be used to make approximately 125 tonnes of magazine paper - which can be recycled multiple times keeping it in the loop for longer - making 1300 trees available for other uses - and avoids 162 tonnes of fossil CO₂e emissions compared with landfill.**

Scope: Calculated cradle-to-grave using the avoided burden approach, January 2023. Fossil CO₂e - GWP 100 years (excluding biogenic carbon), analysis of different end-of-life scenarios for the release liner: recycling (mechanical) vs. incineration vs. landfill. The comparison includes the avoided emissions from papermaking process for recycling, energy and electricity production for incineration, and emissions of paper degrading in landfill. Results include transportation of the release liner using default distances to recycling (derived from a weighted average of the RafCycle™ service) and liner weight based on UPM Raflatac's standard paper liner.

Based on: UPM Raflatac's LCA study, externally verified and performed based on the guiding principles laid out in ISO 14040/44 and PAS 2050 standards; Includes content supplied by Sphera Solutions GmbH; Copyright 2022. Results are indicative and information is subject to change without notice. Results of different LCA or carbon footprint calculations cannot be compared.

In the context of your packaging innovation, what do you see as Sustainable Packaging?

Dr Carol Kilcullen-Lawrence, Sustainability Consultant, UPM Raflatac says, "RafCycle™ by UPM Raflatac is the original label release liner recycling service built for circularity. The global waste issue is real. The impact of the linear use of materials drives climate change. For brands, this reality is felt through tightening sustainability regulation and consumer trends. In the process of labelling products, the label release liner is an often overlooked waste stream. UPM Raflatac is here with a hands-on recycling solution that enables the circular economy and has a positive climate impact. They already have more than 400 partners worldwide with them on this journey towards pure circularity and have optimised the RafCycle program for Australia."



A company that recycles approximately

100

tonnes of paper release liner



Avoids

22

tonnes of fossil CO₂e emissions compared with **incineration**

or



Avoids

162

tonnes of fossil CO₂e emissions compared with **landfill**

What would you say were the decision-making drivers (Internal and External) influencing your packaging design?

Major brands have publicly communicated their targets related to recycling and recyclability. They are challenging their direct and indirect suppliers to come up with innovations to support their projects in this field. RafCycle is a good example of such value chain collaboration.

What benefits does this new design offer your business and your consumers? Why is the pack more sustainable?

With tightening sustainability regulations and consumers demanding more sustainable solutions. In the process of labelling products, the label release liner is an often overlooked waste stream. With RafCycle™, you can put those valuable raw materials into better use.

What volumes of materials, packaging and waste have you saved by designing this new packaging?

Did you do this through changing materials, lightweighting, recycled content, making the packs recyclable or reusable?

RafCycle™ is label release liner waste recycling at its simplest. Collect your waste, and UPM will arrange a pickup and UPM transform the waste into new paper products.

- Total amount of liner waste recycled with RafCycle™ between 2014 and 2022 equals to the weight of over three Eiffel Towers.
- 463 000 trees left for other uses.
- 334 long-haul flights worth of CO₂e emissions avoided compared with landfill.



How much on-pack and off-pack information do you provide your customers?

As a label liner recycling scheme, RafCycle™ is not relevant to on or off pack information. The scheme operates as a service to brand owners using self-adhesive labels by providing a convenient pathway for glassine release liner to be collected cost effectively and recycled. This avoids landfill which for many years has been the only option in Australia.

On your entry form you would have indicated the companies/individuals involved in the development of the sustainable packaging design.

Can you explain each of their roles?

RafCycle™ by UPM Raflatac is a scheme designed so that glassine paper release liners can be de-siliconised and recycled into pulp and paper. UPM Raflatac can utilise their extensive collection network to facilitate cost-effective release liner recycling. UPM Raflatac is a frontrunner in solutions for managing the challenges of label waste. Through their RafCycle™ recycling service, they offer their partners possibilities to contribute to circular economy by turning their label waste into a resource. They look forward to developing new and existing partnerships with customers and brand owners on the road to zero landfill waste.

What do you feel will be needed to further improve packaging design in the future? (e.g. education, investment, policy/legislation, tech, etc?)

The world of packaging is going through fundamental change, the likes of which we have never seen before. With shopping moving online at a rate unimagined just a couple of years ago, brands are rethinking how they treat the package and the product. Packaging sustainability has become a necessity that is reflected in packaging design trends on many levels, from the use of new innovative raw materials to reusable packaging, and even utilising a QR code to communicate the origin of the product transparently. People want to know more about the value chain of the products they consume and whether it fits their sustainability goals.

What does your company have planned in the future? Any new innovations on the horizon?

UPM Raflatac's ambition is to be the first label materials company beyond fossils. The company takes climate action by increasing the use of certified papers and the traceability of other biobased materials, by fostering a reduction of greenhouse gas emissions, and by developing innovative solutions that meet the needs of sustainably minded brands and companies. UPM Raflatac is determined to take concrete steps to reduce the greenhouse gas emissions of its operations and continue developing leading solutions for its customers. At the end of the day, sustainability is a joint effort. The company partners with multiple organisations and global experts that share its vision of a sustainable, low-carbon future beyond fossils.



A company that recycles approximately

100

tonnes of paper liner waste per year



Yields

75

tonnes of pulp made from paper liner waste



This can then be used to make approximately

125

tonnes of magazine paper



Making

1300

trees* available for other uses

which can be recycled multiple times keeping it in the loop for longer. In total 625 000 magazines.

* at an average of 0.25m³

As a winner of the PIDA awards, how valuable is the award to your organisation?

Juha Virmavirta, Director of the RafCycle™ service at UPM Raflatac, has been working with RafCycle™ since 2016. *“The RafCycle™ service has been growing steadily over the years, avoiding a lot of unnecessary CO2 emission, and winning an Australasian PIDA award helps spread the word that through well-planned and executed collaboration between companies, circular economy will become a reality.”*

“It’s great to be able to do our part to close the recycling loop and achieve a truly sustainable circular economy and support our customers by addressing the liner waste challenge together,” says Damian Thomas, UPM’s Queensland sales manager.



You have been awarded a WorldStar Packaging Award. What does this mean to your business?



“It is with great honour and pride that our RafCycle service has been awarded a prestigious WorldStar Packaging Award for the category Packaging Materials and Components. This esteemed recognition serves as a testament to our RafCycle service, which helps recycle liner waste and gives it a second life. We are grateful for the opportunity to showcase how we strive to mitigate the climate changes, further solidifying our position as a leader in the labelling industry. This award not only validates our expertise and commitment to contribute to the circular economy, but also fosters trust with our valued customers, partners, and stakeholders. Additionally, it provides us with a competitive edge in the market, distinguishing our products and services from others. We are confident that the WorldStar Packaging Award will yield both tangible and intangible benefits, positively impacting our business and brand. We will continue to work with partners along the value chain to build the circular economy,” said Juha Virmavirta, Director, RafCycle.



The Australasian Packaging Innovation & Design (PIDA) Awards are an Australia and New Zealand program that is coordinated by the Australian Institute of Packaging (AIP). The awards recognise companies and individuals who are making a significant difference in their field across Australia and New Zealand. The PIDA Awards are the exclusive entry point for Australia and New Zealand for the prestigious WorldStar Packaging Awards.

The Design Innovation of the Year company awards recognise organisations that have designed innovative packaging within each of these six manufacturing categories:

- Food
- Beverage
- Health, Beauty & Wellness
- Domestic & Household
- Labelling & Decoration
- Outside of the Box

There are four special awards available:

- Sustainable Packaging Design
- Save Food Packaging Design
- Accessible & Inclusive Packaging Design
- Marketing Award

The **Sustainable Packaging Design Special Award** is designed to recognise companies that have developed innovative packaging solutions that incorporate sustainability considerations. All entries are judged on Sustainable Packaging Design considerations such as social impact, material, source reduction, energy and recovery and what packaging changes the company is undertaking to meet the 2025 National Packaging Targets. This is also a WorldStar Packaging Awards category.



The Australian Institute of Packaging (AIP) is the peak professional body for packaging education and training in Australasia. The AIP helps shape the careers of generations of packaging professionals – from packaging technologists to international packaging business leaders along with a host of people in associated disciplines – sales and marketing, purchasing, production and environment.

Australian Institute of Packaging

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