

DULUX 50% rPP PAINT & LID



2023 SUSTAINABLE PACKAGING DESIGN OF THE YEAR - RECYCLED CONTENT BRONZE WINNER



Pact Group & Dulux Group

Dulux 50% rPP Paint & Lid



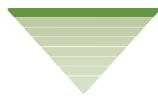
Key Outcomes and Measurement

- Equates to approximately 32 tonnes of plastics that can be reused and diverted from landfill per annum
- Eliminates 71 tonnes of CO2 annually, the equivalent to planting 106 trees
- Consumers can responsibly recycle via the Paintback product stewardship program
- Locally sourced collection into packaging to create a circular economy
- 50% recycled rPP 15L Paint pail for Dulux's Enviro02 range
- First major paint brand in 50% recycled plastic pails in Australia
- The rPP blend is locally sourced pre-consumer and post-consumer resin sourced from a MRF
- Made from recycled ice cream, yoghurt, margarine and takeaway containers

Sustainable Packaging Guidelines



Optimise Material Efficiency



Design for Recovery



Provide Consumer Information on Sustainability



Use Recycled Materials



Product: Dulux 50% rPP Paint & Lid
Company: Pact Group & Dulux Group
Country: Australia

At Pact, their vision is to lead the Circular Economy through innovative Packaging, Reuse and Recycling solutions. Since Pact's inception, they have been creating smarter ways of reducing waste through reusing and recycling resources, therefore keeping them in circulation well into the future. Pact constantly strive to find better ways of doing things to grow business, enhance sustainability and enrich people's lives. As a future-driven group, they are committed to creating lasting value for the environment. The entry was for a Dulux and Pact collaboration to develop and launch a 50% recycled Polypropylene (rPP) 15L Paint pail for Dulux's Enviro02 range - the first major paint brand packaged in 50% recycled plastic pails in Australia.

COORDINATED BY



ANZ REGIONAL AWARDS PROGRAM



INTERNATIONALLY ENDORSED BY



EXCLUSIVE ENTRY TO



DULUX 50% rPP PAINT & LID

- ✓ **50% recycled PP Paint Pail.**
- ✓ **1st major paint brand packaged in 50% recycled plastic pails in Australia.**
- ✓ **32 tonnes of plastics reused per annum.**
- ✓ **Exceeds 2025 National Packaging Target of 20% rPP inclusion.**
- ✓ **rPP is a blend of both locally sourced post-industrial and post-consumer resin sourced from a Material Recovery Facility (MRF) including recycled ice cream, yoghurt, margarine and takeaway containers.**
- ✓ **Working towards 70% rPP inclusion.**

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

Shamah Waters, Head of Marketing, Pact Group says, *"Sustainable packaging is packaging that produces the most negligible impact on the natural environment. In this instance the package has been manufactured with recycled plastic - repurposing it and diverting it from landfill."*

The rPP used for this project is a blend of both locally sourced post-industrial and post-consumer resin sourced from a Material Recovery Facility (MRF) including recycled ice cream, yoghurt, margarine and takeaway containers.

Based on Dulux's projected annual volumes, transitioning from virgin to 50% rPP equates to approximately 32 tonnes of plastics that can be reused and diverted from landfill per annum.

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

Consumers are increasingly demanding sustainable packaging and the use of recycled content which supports the local circular economy.

According to propriety research by Pact Group:

- 88% of Australian consumers are supportive of the 2025 National Packaging Targets.
- 74% of Australian consumers prefer Australian sourced recycled content to be used to manufacture recycled packaging.
- 60% of Australian consumers actively look for products that use recycled materials in their packaging.
- 85% of Australian support a ban on importing recycled content.

Pact Group - Attitudes to Packaging Consumer Study. Quantum Market Research (July 2020). N=1000.



DULUX 50% rPP PAINT & LID

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

All consumers of paint will benefit from being a participant in the local circular economy knowing their household recycling will be now incorporated into the manufacturing of new paint packaging.

This innovation will help build the Australian nation's confidence that an Australian based packaging manufacturing company and major paint manufacturer can collaborate to use significant volumes of locally sourced recycled content from kerbside collection into packaging to create a circular economy.

Dulux and Pact's partnership works to educate consumers on the difference between virgin and recycled material, and the importance of recycled content in driving a circular economy for plastic packaging. Through the campaign, Dulux aims to empower consumers to 'buy better' through sustainable purchasing decisions. As well as this, through focusing on two key actions, making sustainable decisions at home, and closing the loop on plastics through buying packaging made with recycled content, the campaign offers an accessible example for other business to replicate in their own education campaigns.

Dulux is also a founding member of Paintback®. Established in 2016, Paintback is an industry-led initiative designed to divert unwanted paint and packaging from ending up in landfill and vital waterways. How the Paintback circular system works:

- Consumer return unwanted paint and packaging to a Paintback® location.
- The packaging and liquid are separated.
- Pact Recycling recycles the pails into resin pellets.
- Pact Packaging uses the recycled resin to manufacture new pails.

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?

Based on Dulux's projected annual volumes, transitioning from virgin to 50% rPP equates to approximately 32 tonnes of plastics that will be reused and diverted from landfill per annum.

Conducting a simplified life cycle assessment using PIQET (Packaging Impact Quick Evaluation Tool), transitioning Dulux pails* to 50% rPP will:

- Eliminate 71 tonnes of CO₂ annually, the equivalent to planting 106 trees.
- Save 2.16M litres of water, and
- Eliminate 5.2T of solid waste annually.

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?

The challenge of this innovation was to redesign the existing pail tooling to accommodate the recycled resin and still achieve the same structural performance and functionality as virgin grade injection moulding material.

The use of recycled content is complex, it takes time, trials, and technical expertise to transition. To structure this project to succeed, Pact and Dulux established a cross functional R&D team that included material scientists, technical engineers, industrial designers, packaging innovation specialist and operational specialists. Trials for this innovation spanned 3-4 months. Early attempts commenced at the inclusion of 10% recycled resin followed by 20%, 30%, 40% and finally 50%. To support this innovation, Pact invested in a blender will be installing a twin cavity machine to increase production efficiency.

The advertisement features the Dulux logo at the top, followed by the product name 'enviroQ2' in a large, stylized font. Below this, the text reads 'The first* paint packaging made with 50% recycled plastic'. A central image shows a 15L Dulux enviroQ2 paint pail with a circular badge on the lid that says 'MADE WITH 50% RECYCLED PLASTIC'. The pail label includes 'LOW ODOUR VERY LOW VOC <1g/L', 'Interior', and 'EPD' (Environmental Product Declaration) icons. At the bottom, the text says 'HELPING REDUCE OUR IMPACT ON THE ENVIRONMENT' and 'TURN OVER FOR DETAILS' with a circular arrow icon.

DULUX 50% rPP PAINT & LID

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

Sanjay Dayal, Managing Director and Group CEO (Pact Group) says, "Packaging targets are not enough – it is time for strict packaging design requirements, set by regulation or even legislation if necessary. Minimum recycled content in packaging should be set at a hard floor, and all plastic packaging must be required to be designed with recyclability in mind. A mandated push will ensure businesses who are lagging are incentivised to take the necessary steps to catch up to industry leaders."

An increase of quality courses in packaging design and material and coating sciences will produce more knowledgeable people in the industry resulting in more innovation in this area.

Packaging manufacturers need to work in closer collaboration with material suppliers, research labs, material scientists etc. to produce the packaging needs of the future.

Businesses involved in packaging need to continue to invest in the education of their workforce to ensure that skilled competent people are making the right decisions in driving the changes in this industry.

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

Currently the 15 litre pails are able to incorporate 50% post industrial and post consumer rPP but both Pact and Dulux are working towards 70% rPP.



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

Sanjay Dayal, Managing Director & Group CEO (Pact Group) says, "Recognition in the Sustainable Packaging Design category of the PIDA's aligns with Pact's vision to lead the circular economy through packaging, reuse and recycling solutions."



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



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

Australasian Office: info@aipack.com.au For PIDA enquiries: pida@aipack.com.au