



2021 SUSTAINABLE PACKAGING DESIGN OF THE YEAR - GENERAL BRONZE WINNER



Nestlé Australia Nescafé Blend 43 Lid & Cap

Key Outcomes and Measurement



Reduce labour task for lid recycling



PP mono material



Replaced cardboard wadding on induction seal



Directs the lid to the correct recycling



Carbon black material removed for lids



Weight reduction of **5 tonnes** per annum

177.6 tonnes

Shift in colour resulted in 177.6 tonnes of plastic recycled



43 products sold in AU/NZ



Australasian Recycling Label on-pack



Meets 2025 National Packaging Targets



Product: Nescafé Blend 43 Lid & Cap

Company: Nestlé Australia

Country: Australia

Nestlé is the world's largest food and beverage company. They operate in 187 countries around the world, and their 291,000 employees are committed to Nestlé's purpose of enhancing quality of life and contributing to a healthier future.

Nestlé offers a wide portfolio of products and services for people and their pets throughout their lives. They have more than 2,000 brands range from global icons like NESCAFÉ or KITKAT to local favourites like MILO, ALLEN'S and UNCLE TOBYS.

COORDINATED BY



ANZ REGIONAL AWARDS PROGRAM



INTERNATIONALLY ENDORSED BY



EXCLUSIVE ENTRY TO



- ✓ **Nestlé is committed to 100% of its packaging being recyclable or reusable.**
- ✓ **NESCAFÉ Blend 43 jar lids were originally using a cardboard wad on its induction seal which stayed on the lid. Although the polypropylene lid was still considered recyclable, the cardboard material was lost in this recycling process as it was carried by the lid into the plastic stream.**
- ✓ **The lid was transitioned from cardboard wad to an EPP, changing the material to a mono-material, improving the recyclability of the material in the mixed plastics stream. This removed a potential 20.3 tonnes of cardboard material contaminating the mixed plastics stream per year.**
- ✓ **The carbon black pigments were removed from darker coloured NESCAFÉ Blend 43 lids to ensure the material gets directed into the correct plastic stream and recycled correctly. This resulted in an additional 177.6 tonnes of plastic materials per year being able to be recycled correctly.**

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

For sustainable packaging, NESCAFÉ needed to ensure packaging is recyclable and can be recycled through the existing infrastructure. While the NESCAFÉ Blend 43 lid was made from a recyclable material, the components within it were not recycled as it did not completely separate in the recycling system.

Nestlé's vision is to ensure that none of its packaging ends up as waste in landfill or in the natural environment.

Their aim is to make 100% of its packaging recyclable or reusable. To achieve this, Nestlé has mapped any of its packaging materials which are not considered recyclable through the on-line Packaging Recyclability Evaluation Portal (PREP) tool, and assigned each non-recyclable packaging component into a project.

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

Nestlé has identified a list of materials that it considers detrimental to the environment, are difficult to recycle, or are unlikely to have large scale collection and recycling in the future - called the 'Negative List'. The published list details when each of these materials will be phased out from Nestlé's existing packaging portfolio between now and 2025.

In addition, Nestlé has developed a comprehensive guide for its packaging innovations and renovations to ensure the packaging is designed for recycling. This guide also ensures that overall lifecycle performance, optimisation of pallet footprint to improve distribution, as well as incorporating recycled content where possible is also considered.



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

The NESCAFÉ Blend 43 jar lids were a polypropylene PP rigid plastic containing an induction seal technology. The lid originally used a cardboard wad on the induction seal, which stayed in the lid after the consumer opened it.

Although the polypropylene lid was considered recyclable, the cardboard material was lost in the recycling process as it was carried by the lid into the plastic stream. The cardboard component therefore contaminated the mixed plastics recycling stream, reducing its overall value.

The transition to an expanded polypropylene (EPP) induction seal wad allows for the entire packaging material to be directed to the correct recycling stream, therefore improving its overall recyclability.

Additionally, darker coloured NESCAFÉ Blend 43 jar lids (black, brown and blue) were originally made using carbon black pigments that prevented the material from being recycled. The carbon black pigment prevented the material from being recognised by the near infra red sensors (NIR) and led to the material being directed into landfill. Nestlé took the opportunity when changing the lid wadding to also remove the carbon black pigments

while maintaining the same colour to ensure the material gets directed into the correct plastic stream and recycled correctly.

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?

The transition of the cardboard wad in the NESCAFÉ Blend 43 lid to an EPP has changed the material to a mono-material, improving the recyclability of the material in the mixed plastics stream.

The change in the lid wadding has removed a potential 20.3 tonnes of cardboard material contaminating the mixed plastics stream per year. Additionally, the change to an EPP wad also reduced significant weight from the packaging, resulting in 5 tonne of overall packaging per year.

Removal of the carbon black pigment from the dark coloured lid (black, blue and brown) has now resulted in an additional 177.6 tonnes of plastic materials per year being able to be recycled correctly.



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

The Australasian Recycling Label (ARL) is applied on pack to communicate to consumers how to correctly recycle the cap. Nestlé is committed to featuring the ARL on all locally controlled artworks including the NESCAFÉ Blend 43 to help consumers know how to recycle right. In the example of NESCAFÉ Blend 43, they include 3 ARL icons - Jar, Lid and Foil - to help coffee consumers know which bin to put which piece of packaging in.

Please share a little bit about each of the partners/collaborators who worked on this packaging design.

Can you explain each of their roles?

This project came to fruition through the collaboration of Nestlé's internal packaging team and their suppliers. Nestlé collaborated with RPC Massmould, the lid supplier, and discussed the issues regarding the non-recyclability of the material. Possible alternatives to the cardboard material and carbon black alternatives were reviewed, while needing to ensure that any changes did not impact the ability of the materials to be used on the production line.

Trials were conducted to ensure the induction seals are performing to the same standard, and from there it was a soft change to run out our existing stock of cardboard wadding to prevent excess write-off and wastage.

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

Food grade recycled soft plastic packaging is a key missing link in Australia's bid to improve waste management and build a circular economy, with a lack of both collection and processing infrastructure making it difficult to keep waste out of landfill and impossible to meet demands for packaging with recycled content.

This means that using food grade recycled soft plastic packaging is not possible without importing the packaging, the base film or the resin.

"Technologies such as advanced recycling allows for soft plastic wrappers to be turned back into soft plastic wrappers. However this is not available in Australia commercially and needs to be their focus moving forward. Industry will need to collaborate and prioritise the implementation of this technology so that they will be able to fully close the loop in packaging recycling within our own backyard."

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

Nestlé's biggest focus in packaging is on sustainable packaging. This can include increasing their use of recycled materials, reducing unnecessary packaging and reducing their use of virgin plastics.

To achieve these challenges, Nestlé will need to consider innovation in packaging design. They are working with their colleagues globally, and there are some great innovations coming in the pipeline for recyclable structures and alternative materials which are being considered for some of their existing packaging formats.

Nestlé have a big focus on ensuring fit for purpose packaging wherever possible, by removing overpackaging and excessive headspace.



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

“Being recognised by the industry and being able to showcase the collaborative work we have done is a great feeling. Having the opportunity to represent anything global is a fantastic opportunity for us and our brand. NESCAFÉ has been around for a very long time, but for us technical folk to still be at the top of our innovation game and keep us competitive certainly keeps that fire going in the belly!”

“We are always committed to seeing these ideas where a seemingly small change can have a huge impact on our materials sustainability performance. Even so, these projects can have a complexity through collaboration across various stakeholders, and it is great to have been recognised by industry for the work that we have done,” Tony Pratt MAIP, Senior Packaging Technologist, Nestlé Australia.



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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