



2022 SUSTAINABLE PACKAGING DESIGN OF THE YEAR - CLOSED LOOP COLLECTION GOLD WINNER



# Nestlé

## KITKAT Prototype Recycled Content Wrapper

### Key Outcomes and Measurement

<p>Provide Consumer Information on Sustainability</p>	<p>Meets 2025 National Packaging Targets</p>	<p>ANZ first for Advanced Recycling</p>
<p>Australian developed cat-HR technology</p>	<p>Wrappers made from plastic crude oil</p>	<p>Prototype <b>30%</b> recycled content wrapper</p>
<p>Consortium of <b>9x</b> partners</p>	<p>Design for Recovery &amp; Material Efficiency</p>	<p>Use of Recycled Materials</p>

### Sustainable Packaging Guidelines

<p>Optimise Material Efficiency</p>	<p>Design for Recovery</p>	<p>Use Recycled Materials</p>	<p>Provide Consumer Education</p>
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**Product:** KITKAT Prototype Recycled Content Wrapper

**Company:** Nestlé Australia

**Country:** Australia

Nestlé are helping create a future where cleverly designed packaging, innovative new materials, better recycling infrastructure and reusable or refillable packaging can prevent waste from contaminating the land and oceans. Reaching this goal requires participation from all levels of society. Nestlé are proud to be a catalyst for that change, inspiring a future where people and partners everywhere rethink how they engage with packaging.

Their vision is ambitious: A world in which none of Nestlé's packaging, including plastics, ends up in landfill or as litter on land or in seas, oceans and waterways. To support this Nestlé has a global commitment to reduce the use of virgin plastics by a third by 2025.

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ANZ REGIONAL AWARDS PROGRAM



INTERNATIONALLY ENDORSED BY



EXCLUSIVE ENTRY TO



- ✓ **The project in its entirety – both collection and processing – provides a clear model for a nationally scalable system. It has acted as a spur to government and industry, demonstrating through a hero brand what is possible with collective action and national scale-up.**
- ✓ **The kerbside collection component has the potential to be scaled up as a national collection system for soft plastics.**
- ✓ **The kerbside collection model complements government funding initiatives.**
- ✓ **The feedstock value chain component of this project demonstrates the potential to close the loop locally.**
- ✓ **The feedstock value chain component also complements government initiatives.**
- ✓ **The NPRS will create generate funding to bring the project to scale.**
- ✓ **Once at scale this can potentially support the region: New Zealand and the Pacific Islands are too small to close the loop and meet ANZPAC Plastics Pact recycled content targets.**
- ✓ **The complexities of three levels of government, a complex waste sector already undergoing change and investment required to move forward pose considerable challenge – this will continue to be a focus.**

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

This project looked beyond end of life towards recycling, exploring waste soft plastic as a resource and setting a vision for circularity.

Nestlé’s vision for a better future for soft plastics in Australia depends on all sectors working collaboratively towards a common goal.

They are committed to making all of their packaging recyclable or reusable by 2025. Nestlé also aim to reduce their use of virgin plastics by 1/3 by 2025.

To support delivery of their commitments they have a 5 pillar Packaging Sustainability Strategy:

- 1) Reducing the use of plastic packaging material
- 2) Scaling the use of reusable and refillable systems
- 3) Pioneering alternatives to plastic packaging materials to facilitate recycling
- 4) Supporting infrastructure that helps to make recycling easier
- 5) Driving new behaviours

Pillar 4 is the focus of this packaging innovation.



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

The trial was born from a need to find a scalable way to collect and process post-consumer soft plastics. At present, while this waste is collected and manually recycled through supermarket collection scheme REDcycle, less than 5% of soft plastics packaging is collected and the scheme is not scalable. As almost all post-consumer soft plastic goes to landfill, the trial aimed to find ways to collect it via kerbside recycling bins, single mixed bins available to most Australian households. The trial tests ways to separate and recover soft plastic from other household recycling at scale, also examined community adoption and consumer communication, and paths to divert plastic from landfill to other uses.



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

The initiative Nestlé used to promote the prototype wrapper was externally focused. They shared the prototype collaboration by hosting leaders from across the plastic packaging value chain for an event, 'The Wrap on Soft Plastics', to open up the opportunities for soft plastics collection and recycling in Australia. Opened by the then Assistant Minister for Waste Trevor Evans, the event provided a platform for a collaborative presentation on the lessons learned so far from the KitKat recycled content wrapper and soft plastics kerbside collection trial and key discussion on next steps to close the loop at scale. The KitKat prototype wrapper showcased what was possible; supported by a call to arms to industry to get involved – with next steps facilitated by industry association AFGC and ongoing advocacy continuing to spread the word and build support.

## 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?

Nestlé use 30% recycled content in the prototype wrapper. From the advanced recycling pilot plant trial 2 barrels of oil were produced which once processed through the value chain was equivalent to one full reel of KITKAT wrappers. The prototype wrapped KITKATs were not sold, rather they were shared with stake holders as a market signal that Nestlé was serious about recycled content. Subsequently they have commercially launched at 30% recycled content in their 45g KITKAT range in June 2022 from imported material as local is not yet available.

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

The prototype wrapper itself very clearly communicated on front of pack, back of pack and through a QR code what how and why this wrapper was created.

<https://www.nestle.com.au/en/csv/nestle-packaging/the-wrap-on-soft-plastics> .

While Nestlé use the ARL on all their locally controlled packaging, including KitKat, it was not included on the prototype artwork as they needed space to clearly explain the concept. All their KitKats sold in Australia and New Zealand proudly use the Australasian Recycling Label on their packs.

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

### Can you explain each of their roles?

To close the loop the wrapper was created by a coalition of companies with a shared vision:

- REDcycle and CurbCycle, collected households' soft plastic waste, some from REDcycle in-store bins and some from the kerbside collection trial (conducted by Nestlé, iQRenew and CurbCycle on the NSW central coast).
- iQRenew sorted the collected soft plastics and created a processed engineered feedstock.
- Licella converted the plastic to oil using their Australian-developed Cat-HTR advanced recycling technology.
- Viva Energy Australia refined the synthetic oil.
- LyondellBasell made food grade polypropylene.
- Taghleef Industries created a metalized film.
- Amcor printed and created the wrapper.
- And finally, Nestlé wrapped the KitKat – keeping it fresh and safe to eat.



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

Nestlé have a vision for a national system.

- The project in its entirety – both collection and processing – provides a clear model for a nationally scalable system. It has acted as a spur to government and industry, demonstrating through a hero brand what is possible with collective action and national scale-up.
- The kerbside collection component has the potential to be scaled up as a national collection system for soft plastics.
  - o It uses existing kerbside bin infrastructure and no additional collections.
  - o The same model can also be used for other recyclable items that are not currently collected in kerbside.
  - o It is replicable in New Zealand.
- The kerbside collection model complements government funding initiatives:
  - o Funding research into better material recovery facility sorting.
  - o Funding upgrading of recycling infrastructure.
  - o Funding development of the NPRS scheme for hard to recycle plastics, including soft plastic.
- The feedstock value chain component of this project demonstrates the potential to close the loop locally.
- The feedstock value chain component also complements government initiatives:
  - o Help meet Australian recycled content target.

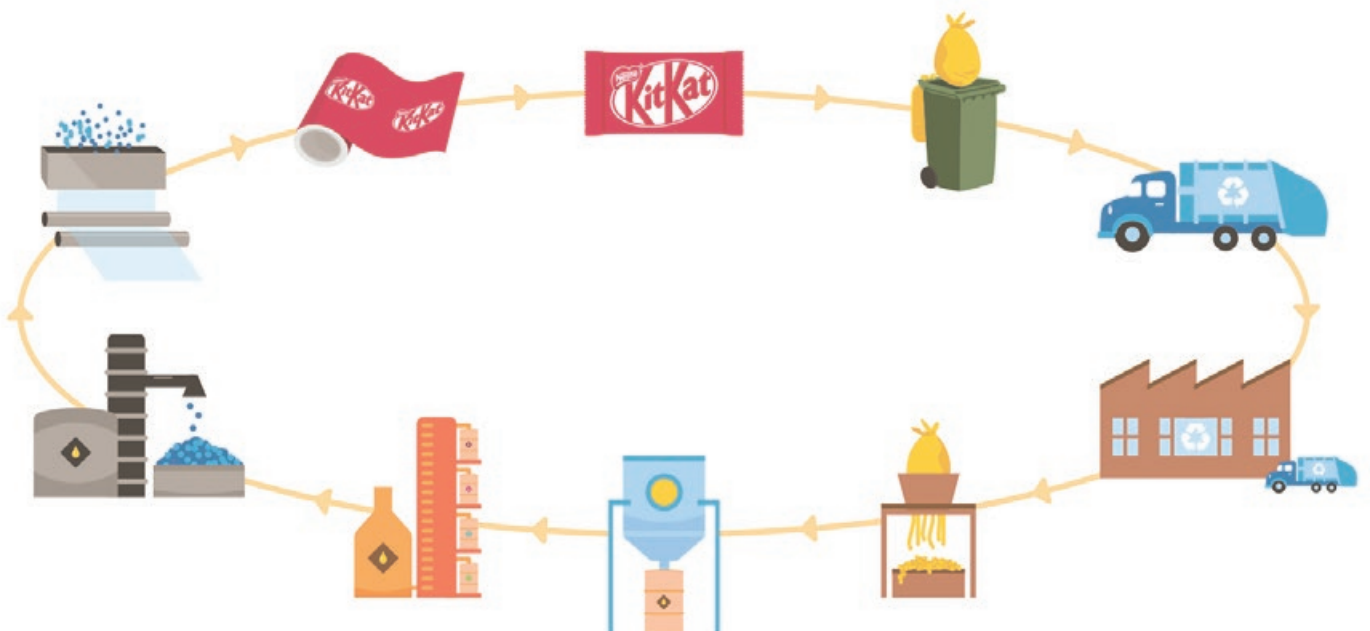
- o Informs NPRS business case and scheme design.
- o Has inspired and energised industry.
- The NPRS will create generate funding to bring the project to scale.
- Once at scale this can potentially support the region: New Zealand and the Pacific Islands are too small to close the loop and meet ANZPAC Plastics Pact recycled content targets.
- The complexities of three levels of government, a complex waste sector already undergoing change and investment required to move forward pose considerable challenge – this will continue to be a focus.

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

To deliver their substantial Packaging Sustainability commitments they have plenty of innovations on the horizon. In June 2022 Nestlé Australia gave chocolate lovers one more reason to enjoy their break, announcing KitKat will be Australia’s first chocolate bar with a wrapper using recycled plastic.

More than 40 million 45g KitKat bars will be packed in the 30% recycled content wrapper in the next year, cutting virgin plastic use by around 250,000m<sup>2</sup>, enough to cover more than 200 50m swimming pools.

See link for more detail:  
[www.nestle.com.au/en/media/news/nestle-au-invests-give-planet-break](http://www.nestle.com.au/en/media/news/nestle-au-invests-give-planet-break)



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

Karunia Adhiputra AAIP, Head of Packaging Oceania, Nestlé Australia says, *“The Nestlé Australia team is very proud that the industry collaboration to demonstrate closing the loop on food grade soft plastics in Australia is possible was recognised by the PIDA awards judges. The new Sustainability Out of the Box category show cases to industry that working and collaborating across the entire packaging value chain is key to delivering overarching National Packaging Targets - beyond how we design our packaging.”*



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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