



# Resi Loop

## Encouraging a circular future for flooring

**The resilient floorcovering market in Australia has grown steadily over the last two decades, driven by innovative design, development and uptake of new products, particularly Luxury Vinyl Tiles (LVT) and more recently, Hybrid or rigid core products.**

Australia today consumes over 22 million sqm or 95,000 tonnes of these products a year.

Nevertheless, there is growing recognition that a resilient industry is one that meets its social licence to operate – that is, it meets the long-term approval of the supply chain, government, customers and the general public.

Members of the Australian Resilient Flooring Association (ARFA) recognise this necessitates addressing expectations of delivering on not just product functionality and aesthetics, but also sustainability performance, including facilitating a circular economy.

Advancing a circular economy for resilient flooring products means not only improving how we source raw materials and manufacture the products – aspects well covered by third party ecolabel schemes such as Best Practice PVC, Global Green Tag and GECA – it also means retaining resources in productive use for as long as possible.

This means improving upfront product design to enable long service life, repairability, reuse or repurposing, and ultimately, recyclability. It is about moving away from a linear “take, make, waste” approach in industry to thinking about – and taking responsibility for – a holistic, circular system where ‘waste’ is virtually designed out and parties along the supply chain collaborate to retain resources in use, reduce environmental footprint and optimise value.

With this in mind, ARFA has developed ResiLoop, the industry’s own product stewardship initiative for resilient flooring.

### HOW RESILOOP CAME ABOUT

The Australian Government has sought to implement policies to design out waste and pollution, keep materials in use and foster markets to achieve a circular economy by 2030. This has included policies to stimulate research and investment to expand Australia’s capacity to sort, process and remanufacture key recycled materials as well as regulations to restrict certain waste exports.

To advance its sustainability strategy, in early 2022, ARFA was fortunate to be awarded a grant from the Australian Government through the National Product Stewardship Investment Fund (NPSIF) to develop a product stewardship scheme for resilient flooring.

As a scheme, ResiLoop’s objectives are to reduce the level of resilient flooring heading to landfill by:

1. Enabling recovery and recycling of resilient floorcoverings in Australia at scale through participation in the scheme by a majority of product distributors and flooring installers.
2. Building onshore recycling capacity by researching and developing new end applications for the recycle, encouraging investment in technologies and employment in the recycling sector, and supplying recycle to local manufacturers to reduce virgin material consumption.
3. Driving sector-wide behaviour changes that contribute to the circular economy by informing product development and engaging manufacturers, distributors, specifiers, flooring contractors, recyclers and consumers.

Over the course of a year, ResiLoop undertook a series of activities that included proof of concept trials, business model development, global industry consultations, and literature reviews. This informed the design of a scheme which was released to stakeholders on 31 May, 2023.



## WHAT IS RESILIENT FLOORING?

Resilient flooring (or floorcoverings) refers to floorcoverings made from materials with some elasticity. This covers a range of products with varying compositions, including Luxury Vinyl Tiles (LVT), sheet vinyl, linoleum/marmoleum, rubber, safety sheet flooring, and hybrid/rigid core tiles.

Resilient flooring is highly durable as a floorcovering and may be suitable for use in high-humidity locations such as bathrooms.

In 2022, over 22 million square metres of resilient floorcoverings were sold into the Australian market, equivalent to approximately 95,000 tonnes.

The products are used across both commercial and residential sectors, including offices, hotels, healthcare facilities, educational institutions, sports facilities, supermarkets, retail shops and housing and typically have a lifespan of around 30 years.

## HOW RESILOOP WORKS

	Stage 1 TODAY	Stage 2 TOMORROW	Stage 3 FUTURE
<b>Waste stream</b>	Installation	Installation	End of first use
<b>Products</b>	LVT, HO, HE (non-textile backed) Members product only	Add: Safety Floor and Hybrid products if feasible Members product only	All vinyl-containing products Non-vinyl products
<b>Consumption Sector</b>	Residential + Commercial	Residential + Commercial	Residential + Commercial
<b>Geographic coverage</b>	Metro NSW, VIC, QLD	Metro, regional NSW, VIC, QLD	National if economically viable

### A PHASED APPROACH

The success of ResiLoop hinges on the identification and development of commercial end markets to reuse the materials since the vast majority of resilient flooring products are imported into Australia. The scheme will therefore expand in a deliberately controlled manner across product categories, waste streams and geographic areas, in three stages.

### WHAT IS COLLECTED

**Stage I** – Implementation will commence with the collection of installation trimmings and stock- and roll-ends from commercial and residential construction, estimated to account for about 9,000 tonnes of material per annum.

The initial product categories collected under Stage I will be Luxury Vinyl Tile, homogeneous (HO) sheet and non-textile backed heterogeneous (HE) sheet.

**Stage II** – ResiLoop will aim to introduce collection and recycling solutions for Safety Flooring and Hybrid/rigid core tile installation waste streams if viable reprocessing solutions and end markets for the recyclates are identified, and will expand the geographic range of collection points for materials in line with reuse volumes.

**Stage III** – This stage will aim to introduce collection and recycling of end-of-first-life materials and all feasible product categories with recycling end markets in Australia.



Nearly 60,000 tonnes of pre- and post-consumer waste is estimated to be generated annually in Australia. ResiLoop will invest to address these harder-to-recycle waste streams and to service, where feasible, less cost-effective locations.

## COVERAGE

ResiLoop will operate across both residential and commercial building sectors.

The program will commence with collections in NSW, Victoria and Queensland which account for roughly 80 percent of the waste generated.

It is estimated that 68 percent of the resilient vinyl flooring end of life waste stream is generated in urban areas and 32 percent in regional and rural areas. The intention will be to focus on expansion of the scheme in urban areas before extending into regional and rural areas where the cost of transportation back to recyclers will be higher.



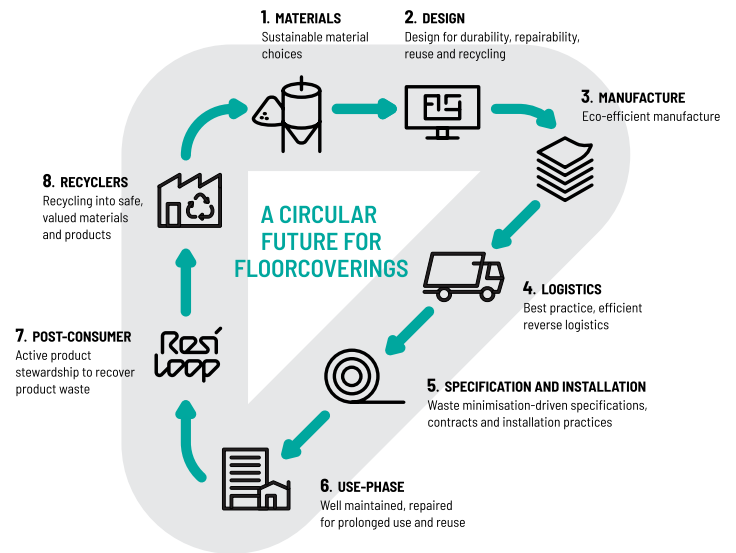
## COLLECTING MATERIAL

ResiLoop will coordinate a network of Collection Points at the sites of commercial flooring contractors, retailers and flooring accessory suppliers. Offcut materials of ResiLoop members' products, collected from job sites by the floor laying trade, can be returned to registered Collection Points, where the materials are aggregated until ready for transportation to a scheme registered Recycler.



## KEY ACTIVITIES

ResiLoop is only one aspect – but an important one – of a circular economy for floorcoverings, as represented in the following figure. ResiLoop's activities are designed to support this circular process and will include encouraging product distributors to consider other aspects such as responsible sourcing of materials and design for circularity. The scheme will undertake a series of activities around building resource recovery capacity, educating stakeholders, managing operations and governance, conducting research, and monitoring and evaluation of progress



## PARTICIPATING IN RESILOOP

- Member Participants
- Collectors
- Collection Points (associate members)
- Recycling Partners (affiliate members)
- Project Partners (associate members)

Manufacturers/importers (brand-owners) joining the scheme will agree to pay a levy on the square metres of relevant products placed into the market. It's intended that levy fees are passed through the value chain, to be eventually paid for, transparently, by end users.

Associate members who register and agree to operate a collection point will pay an annual membership fee which is more than offset by savings on their costs of waste disposal.

Recyclers contracted to receive the recovered materials will be affiliate members, giving them some surety of supply. There will be no membership fee.



## THE ROAD AHEAD

Over 50 stakeholders relevant to the resilient flooring industry signed a Collective Action Statement confirming their support for the design, development and establishment of ResiLoop as a national industry approach to enable recovery and recycling of resilient floorcoverings in Australia. These signatories agree with the design principles for an industry funded scheme as outlined in the ResiLoop Scheme Design document.

With this encouragement, ResiLoop is now poised to enter the next phase:

**Building Momentum** – the implementation phase to operationalise ResiLoop.



## BUILDING MOMENTUM FOR RESILOOP

Establishing ResiLoop's operation is estimated to require 12-18 months. Between June 2023 and the second half of 2024, several steps need to be achieved including:

### Lock-in recyclers and end markets

Confirm viable end market(s) for the recycle and secure commercial agreements to take the materials.

### Recruit foundation scheme members

Actively recruit the foundation members of ResiLoop as well as build the necessary infrastructure to onboard them

### Conduct a waste recovery and recycling pilot

Conduct a large scale pilot to fine tune the collection strategy ready for operation, including:

- Strengthening the proof of concept for recycling/reuse of materials

- Developing the recruitment and onboarding process of collectors and Collection Points
- Confirming geographic coverage
- Identifying logistics providers
- Developing training materials
- Preparing recognition and rebate systems

### Establish the legal entity

Establish a Product Stewardship Organisation as a legal entity with appropriate governance, insurance, policies and procedures. Seek authorisation of the scheme from the Australian Competition and Consumer Commission if necessary.

### Raise awareness

Develop the necessary marketing and communications strategy to achieve broad awareness of the scheme among industry and key stakeholders.

### Collect and manage data

Design, develop and trial a suitable digital tool to track data for the scheme and manage key reporting metrics.

### Launch

Once the key elements are in place, the business model will be refined to set fees based on targeted and predicted costs and revenues, and the scheme prepared for its operational launch.

### WANT TO LEARN MORE?

For more information on ResiLoop visit the website today: <https://www.arfa.org.au/resiloop.html>

Find out more about the project background: **ResiLoop Report Part 1: The Project**

For a more detailed look at the scheme design: **ResiLoop Report Part 2: Scheme Design**

For an update on next steps: **ResiLoop Report Part 3: Roadmap**