It’s a Multi-material Circular World
95% of plastic packaging material value or USD $80–120 billion annually is lost from the global economy.
Design for circular plastics

Many types of plastics do, by the nature of their design and polymer type, end up in landfill, incineration or leaked into the environment ending up in oceans.

- Single use sachets, lids, candy wrappers
- Multi-material packaging
- Polystyrene and expanded polystyrene
- Fast-food packaging
Next Generation Cup Challenge

Footprint creates cups, lids and straws that are fully formed fiber-based solutions, with an aqueous-based coating that is recyclable and compostable.

SoluBlue material is made from 100% food grade ingredients derived from plants.

At Colombier doesn’t use plastic as a cup line but a water based, recyclable and compostable coating.

Next Generation Cup Challenge
The future of packaging

Fiber Technology

Footprint fiber technologies are unmatched in the fiber industry. Fully biodegradable, compostable and recyclable, our solutions are designed to protect the environment.

Print Technology

Footprint’s direct print capabilities deliver revolutionary brand differentiation and cost savings by allowing our customers to ditch wraps and print direct.

Barrier Technology

Our barrier technologies eliminate the need for plastic liners. Our integrated barriers provide oil, water, and oxygen for a wide range of applications.
The future of packaging

Notpla Liner

Water proofing and grease proofing cardboard takeaway boxes.

Our latest product is tackling the problem of lined cardboard, usually coated with plastic made from oil or corn, both non sustainable.

We’ve developed a coating made from Notpla for the food takeaway industry. It’s natural, biodegradable and even repulpable.
The primary business model is to lease the machines and sell cartridges of materials to co-packers and event organisers, enabling them to produce and sell fresh Oohos containing drinks or sauces as desired.
Reusable plastics

Design plastic packaging for a minimum number of re-use or rotations in a re-use system – alternative product delivery system.

Refillable packaging is becoming increasingly attractive that are part of alternative product delivery systems.
The business model is very simple: Algramo fills the machines, installs them for free in small neighborhood stores, and splits the profit evenly with shopkeepers.
Local Melaka Example
Reusable Plastic Containers
The Economics of Recyclable Plastics

1. Recyclable plastics is US$72 per ton extra than virgin plastics.

2. Brand owners, increasingly under pressure to use recyclable plastics (or close the loop) will pay 5% extra.

3. “The real challenge is to open up large markets and contracts to recyclers who will invest in modern technology on a large scale to supply the resins to recycle back into products. This will also align product designs into concepts that are truly recyclable economically. We should be supporting a "Recycling Grey" as a badge of sustainability rather than promoting packaging from beach plastics.”
Recyclable Resource Collection

Visit Recyclable Resource Recovery – Circular Economy Asia website

CircularEconomyAsia
National Resource Recovery Policy

1. There are many small scale recycling initiatives that need to be aligned to a national program, which includes common language, circular outcomes and information.

2. Separation-at-source must be enforced.

3. Use of technology to offer choice for consumer engagement and data collection can provide accurate information for public / private partnerships for investment and improvement over time.

CircularEconomyAsia
The Melaka River Walkway is an important asset to Melaka’s tourism industry yet maintenance costs are high. Reprocessed plastics planks means no rot, splinter, seasonal painting or termite infestation + a 25 year guarantee.
Products from Reprocessed Plastics

- Deck Framing & Drainage
- Composite Decking
- Deck Railing
- Decking & Railing Duos
- Outdoor Lighting
- Furniture, Pergola & Outdoor Kitchens
- Fencing
- Collections

CircularEconomyAsia
The Grundig vacuum cleaner is made from recycled electrical/electronics plastics, Arcelik AS.
Chemical Recycling

1. Mechanical recycling for separated plastics
2. Only for degraded, contaminated and complex plastics
3. Not for plastic-to-fuel processes
4. Promote reduction for plastics and plastics that can be reused.
5. Innovation into plastic material design
6. Promote human behaviour change to dispose of recyclable resources responsibly - to guarantee reprocessing.
7. Verification to ensure only processes with a lower carbon footprint than the production of plastic from virgin feedstock can be classified as chemical recycling.
Why A Sense of Urgency?

1. Sustainability & circular systems is now becoming a demand driven industry yet there is a enormous lack of supply.

2. Food & beverage industry, tourism, fashion, automotive, aerospace – not just for circular plastics.

3. Transition to circular business is a step-by-step process, yet basic risk reduction research is still necessary.

4. Collaboration with prospective customers is vital in these early days in becoming a circular economy.

5. Unless a company changes – high probability of bankruptcy

CircularEconomyAsia
START RIGHT NOW TODAY!!
Circular Economy Asia

The Nine Steps

Step One
Circular Systems

Step Two
Circular Company

Step Three
Stakeholder Engagement

Step Four
Circular Design

Step Five
Circular Supply Chain

Step Six
Product-as-a-Service

Step Seven
Circular Business

Step Eight
Circular IoT

Step Nine
Circular Reporting

Towards a Circular Business

The Asia Plastics & Packaging Agreement

A roadmap for a sustainable and circular plastics and packaging industry

Redefining Recyclable Resource Recovery Collection Systems For Asia