

## Not SO fun Facts:

- In 2014 people bought 60% more garments than in 2000
- Fashion production makes up 10% of humanities carbon emissions. more than international flights and maritime shipping combined.
- Fashion production also dries up water sources and pollutes water.
- 85% of textiles go to the dump each year, enough to fill Sydney harbour annually
- washing some types of clothes send thousands of microplastics into the ocean, 500,000 tones each year = 50 billion plastic bottles.
- Zara puts out 24 collections per year and H&M between 12-16
- The equivalent of one garbage truck of clothes is buried or dumped each second.
- producing polyester releases two to three times more carbon emissions than cotton, and polyester does not breakdown.
- fashion industry is the second largest consumer of water worldwide.
- Dying of fabric uses enough water to fill 2 million olympic sized swimming pools per year.



# Ellen MacArthur Foundation

- Make Fashion Circular initiative

In May 2017, Make Fashion Circular was originally launched as the Circular Fibres Initiative, at the Copenhagen Fashion Summit. The initiative brings together leaders from across the fashion industry, including brands, cities, philanthropists, NGOs, and innovators. Its aim is to stimulate the level of collaboration and innovation necessary to create a new textiles economy, aligned with the principles of the circular economy.

One year later, at the 2018 Copenhagen Fashion Summit, the Circular Fibres Initiative entered its second phase: Make Fashion Circular. To thrive, and not just survive, the fashion industry needs to radically redesign its operating model. By transitioning to a circular system, where we keep safe materials in use, the industry can unlock an enormous economic opportunity.

To really Make Fashion Circular, businesses, governments, innovators, and citizens need to join forces. Make Fashion Circular brings together industry leaders including Burberry, Gap Inc., H&M Group, HSBC, PVH and Stella McCartney as Core Partners. Make Fashion Circular has been made possible by C&A Foundation, MAVA Foundation and players of People's Postcode Lottery.

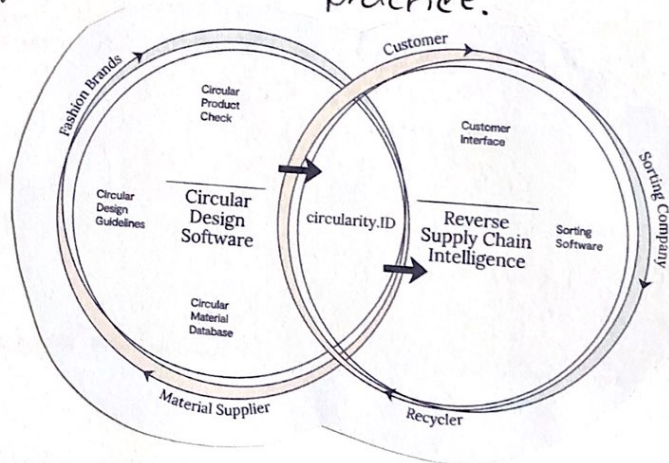


# Circular. fashion

• Circular. fashion is a sustainable change agency creating product and system innovation for a circular economy in fashion and textiles using:

- A Digital platform for: Material suppliers, fashion brands and recyclers including a circular design software that creates unique circularity. IDs for garments. This digital tag provides transparent information to users and sorters to ensure closed loop recycling.

- consultancy & training that encourages and enables fashion brands to incorporate circularity into the core of their business. We provide industry knowledge and methods that help brand transition towards circular practice.



Explore each part of the circular.fashion system:

1. The Circular Design Software, workshops and sourcing support for fashion brands, enable recyclable product design.
2. The circularity.IDs in garments inform customers and sorters to successfully bring them back into the loop by reusing, updating or regenerating into new fibres.
3. Our highly innovative recycling partner network ensures that your products of today will become the resources of tomorrow.

**Moving towards a circular economy is not an option - it is essential to survive as a business in the future. Be part of the change and join the circular.fashion system.**

Sorting software - This is an awesome of the circularity.ID!

The circularity.ID enacts a sorting software where circular garments quickly can be identified at sorting facilities and sent to the matching recycling partner. In the future, the option to bring these recycled textiles back into the production stream will be possible, creating an endless textile loop.



# Sustainable Development Goals





# Pure Advantage & The Formary

- **pure advantage** is an organisation on a mission to champion environmentally focused economic models and business practices as the best way for NZ to become and remain a world leading, climate positive, economically thriving and socially just society.
- pure advantage is a facilitator to help kiwi businesses adopt more sustainable practices.
- on their website they have many resources surrounding sustainable practices.
- **The Formary** is an extension of pure advantage. They transform surplus fibres into luxurious fabrics for the home, specialising in the development of cutting edge designer textiles that are kinder to the planet.
- their textiles include "Wojo" which is made up of wool and jute repurposed from coffee sacks. "Juton" which is made up of 40% coffee sacks 30% cotton off cuts and 30% new cotton and "Mibu" which is made up of wool and rice straw.

## - Alabama Chanin -

- The Brand began in 2000 with the creation of hand sewn garments made from cotton Jersey T-shirts by founder and slow design pioneer Natalie Chanin. They maintain responsible, ethical and sustainable practices holding themselves to the highest standards for quality.
- The school of making is an extension of the brand. It is a way of educating people on what is important to the brand.
- Alabama Chanin began as a DIY enterprise. Naturally the workshop programming, the school of making was born out of this DIY initiative. They found that the hands on effect of the workshop allowed people to really connect with the making process and the importance of an organic supply chain.
- Alabama Chanin are completely dedicated to the ethical and sustainable production of their garments.  
"Thought full Design. Responsible Production. Good business. quality that lasts" - from their website  
↑  
Perfect way to summarize the brand and something all brands should be striving for.









# - Alabama Chanin -

## ways in which they re-use:

- Scrap fabrics go into:
  - often worked into other garments, or become a key component of them.
  - decorations
  - Made into wreaths
  - employed practically in mending
  - factored into the jewellery casting process
  - baling them to creating seating for areas in the factory.
- Promote "waste not, want not"
- Sell bags of their scraps in the stool of making store.
- Mending; Repurpose, Repair, and restore your wardrobe.
  - can develop relationships with clothing.
- patagonia partnership (2017)
  - repurposing down jackets into one of a kind scarves
  - once scarfs have reached the end of their life you can trade it in through the patagonia worn wear program
- promote environmental organisations



# Kowtow

## Company history

Kowtow is a New Zealand owned and operated fashion label and was founded in 2007 by Gosia Piatek, the brand was created to make positive change in the fashion industry, and only use renewable and sustainable fibres and ethical manufacturing. Piatek doesn't come from a business or fashion background but one day decided after leaving her job that she wanted to create something that can do good in the world. Kowtow started off only selling t-shirts, then moved on to more garments and now sell everything from housewares to underwear.

## Nature and place in design the industry

Kowtow has a very special place in the fashion industry as they are incredibly sustainable and ethically focussed. Kowtow is a **very transparent company**, they share a lot of information about the fabrics they use and where they come from, how ethical they are and many other things on their website. They choose to create collections that are utilitarian, minimal and carry an understated sense of femininity. The kowtow style is very simple and minimalistic focusing more on beautiful colours accompanied by lovely well thought out silhouettes. All of Kowtows garments are **produced in India in only 5 factories as Piatek says that these are the only factories she trusts to pay a fair wage and paid breaks etc.** Kowtow's team in New Zealand challenge Piatek to keep the brand's ethical standards high. Kowtow's **buttons are all made from recycled hemp. Their parcels are also sent out in recycled card packages.** Kowtow hasn't yet found a source of **sustainable, ethically produced zips**, so Kowtow clothing doesn't use them. They come up with inventive design solutions to replace the zip.

- piece I wrote for a different paper



# Kowtow ↩

- everyday basics made from 100% organic cotton.
  - rainfed, non-genetically modified seed.
- Ethical wool coats are made from a blend of ZQ certified NZ merino and certified Global recycled Standard recycled nylon.
- Lenzing tencel, a biodegradable fibre made using wood pulp from forest Stewardship Council certified forests.
- Design with longevity in mind
- Support fair wages, no child labour, gender equality and grower community.
- environmentally friendly dyes and washes.
- Swimwear is made from Econyl (Regenerated nylon)
- offer complimentary repairs through their repair program.
- Take back program
  - return unwanted garments for a \$10 voucher.



Kowtow





# Maggie Marilyn

Maggie Marilyn are a brand that focus greatly on ethical and sustainable practices and are incredibly aware of the necessity of a move towards circular fashion. They have recently released their sustainability strategy for 2020 and have outlined how they will change the way they do things in order to align with the united nations sustainability development goals.

Below is a piece from their website outlining their vision statement and objective targets;

## “Vision Statement

To turn the fashion industry around to become circular, transparent, accountable, and empowering. We will leave the world a better place than we found it.

## Objectives and Targets

Outlined below are the commitments we are making as a business to achieving our vision. We have split them into the following three categories: People, Planet, and Prosperity.”

I believe Maggie Marilyn is a brand with the right idea. When reading through their sustainable strategy it was very clear that they were not just talking about this change but they know how they are going to make these changes.

Relating to circular fashion they have multiple objectives to help them as a brand move more towards becoming circular. Firstly they plan to use at least 30% reused natural fibre in each collection. They also plan to use “10% of total material meterage used in our ready to wear collections to be from repurposed materials. 10% of total material meterage used in our ready to wear collections to be from repurposed older MM garments. (20% of total collections from repurposed material).”

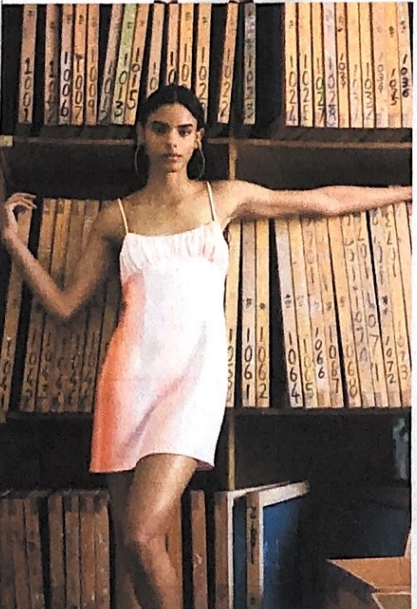
Below is a screenshot of the overall changes they plan to make;

	Objective	2020 Target	
• Planet			
01.	To remove virgin sourced synthetic fibres from our garments.	100% of synthetic fibres used sourced from post-consumer waste.	Investigate solutions to stopping microfibres being released when garments are washed.
02.	To use recycled natural fibres.	Use a minimum of 30% recycled natural fibres in each collection.	Educate our customers to reduce the machine washing of their synthetic garments.
03.	To use organic cotton.	100% of cotton used to be organically certified by GOTS (link).	
04.	To use repurposed materials.	10% of total material meterage used in our ready to wear collections to be from repurposed materials.	100% of total material meterage used in our ready to wear collections to be from repurposed older MM garments. 20% of total collections from repurposed material.
05.	Responsible chemical use.	100% of our textile suppliers to be signed up to our Supplier Code of Conduct (which includes parameters around the responsible use of chemicals).	100% of virgin fibres to be certified with a responsible chemical management certification body.
06.	Responsible water usage.	Engaging water management with our supply chain to better understand the impacts on water from our business practices.	
07.	Fluorine GHG emissions.	Engage with carbon experts to establish what our baseline carbon footprint is.	Engage with our freight partners to ensure we are as efficient as possible when transporting our goods to minimise our transport emissions.
08.	Embodied annual water use.	Ensure 100% of our annual product suppliers meet the H&M annual water standards (outlined in our SDCG). (link)	Investment and support of staff to minimise their carbon emissions. High intention to become Carbon Neutral certified.
• People			
09.	Gender Equality.	Work with industry peers and NGO organisations to champion and enforce equal pay and gender equality within fashion.	100% of suppliers sign our Supplier Code of Conduct (link) (which includes treating all genders equally, and zero tolerance for discrimination).
10.	By this we mean a safe, healthy, empowering working environment and fair pay for all staff, manufacturers and suppliers.	Build strong, trusting, open, and long lasting relationships with all our suppliers.	We will audit each individual supplier on a bi-annual basis to ensure they meet our Supplier Code of Conduct (link).
11.	Provide access and support for personal and professional growth.	Engage with experts and our external suppliers to begin developing education projects for the communities of our suppliers.	100% of suppliers sign our Supplier Code of Conduct (link) Engage with our NZ manufacturers to encourage providing their staff the NZ Living Wage (link).
• Prosperity			
12.	Responsible, accountable, and transparent.	A bi-annual, globally recognised, sustainability report.	Proactive and ongoing openness and transparency with all our stakeholders so to how we do business including regular website updates and social media posts.
13.	NZ Made.	100% of all MM garments to be made in NZ excluding our footwear. (link)	
14.	Supporting our local community.	Continue to support Sweet Charity (link) financially and by way of mentoring. (link)	

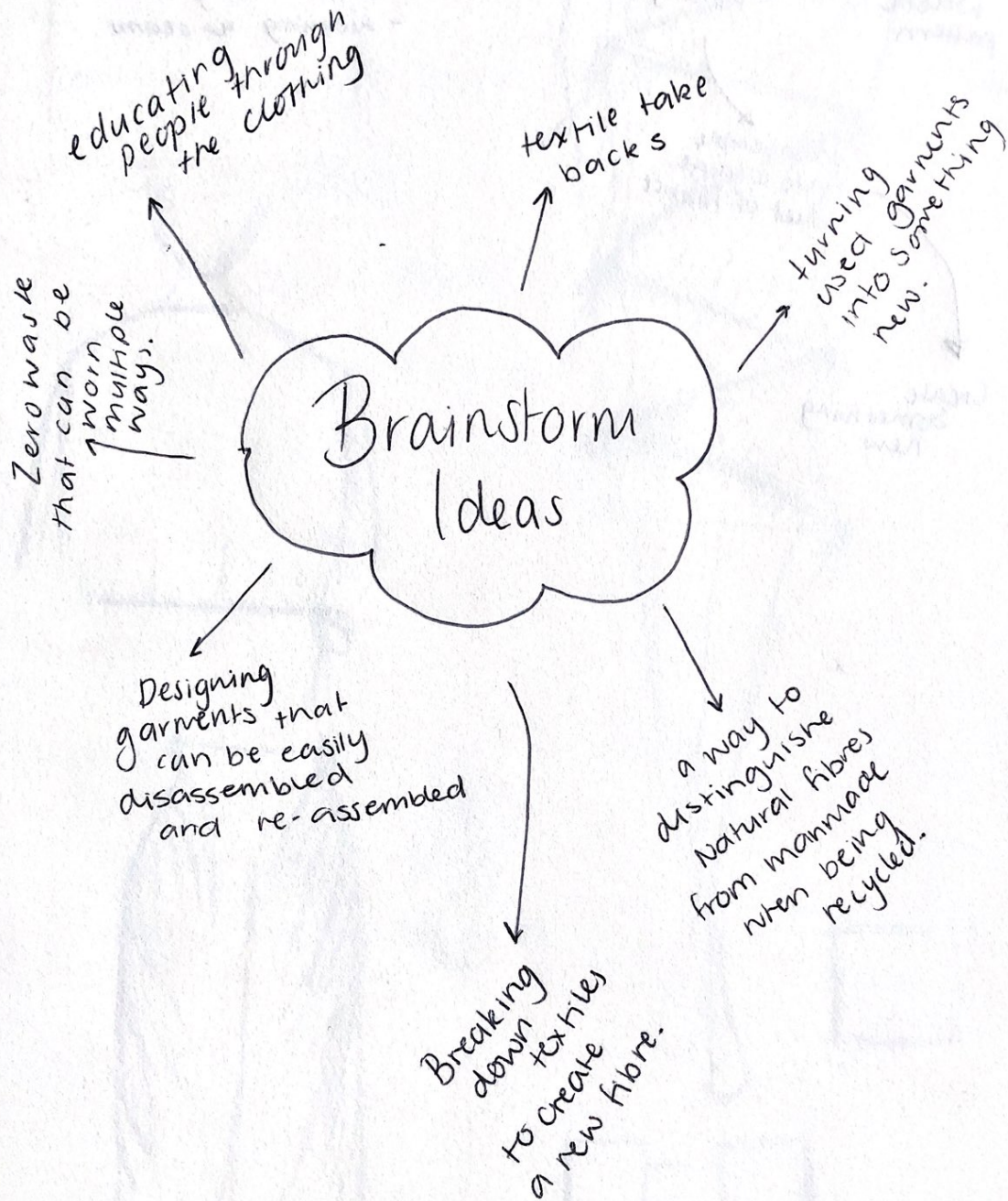




Maggie Marilyn

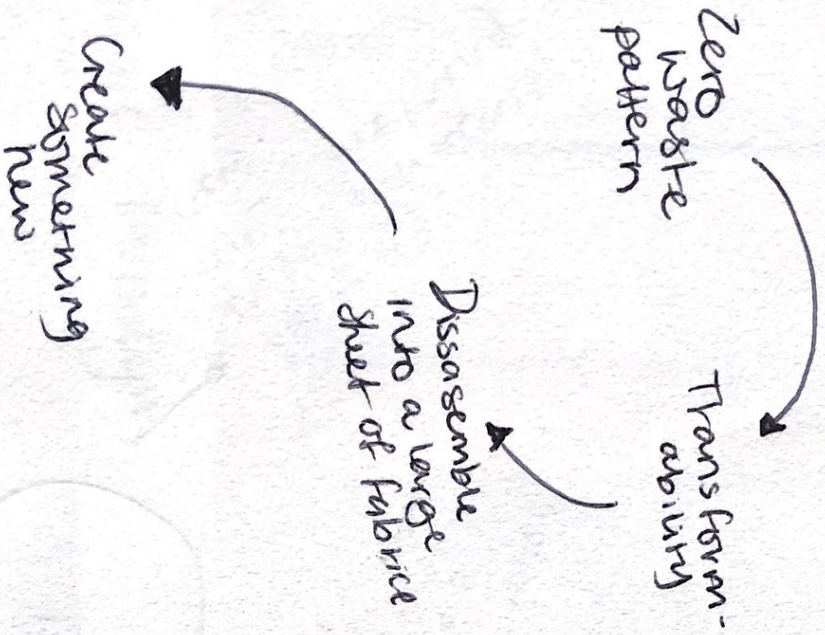








# Ideas - Design for transformability, Design for Dissassembly.



- Construction:
- Water Soluble thread.
  - Iron away thread.
  - Weaving at seams