



# *Wrapped in* Cotton



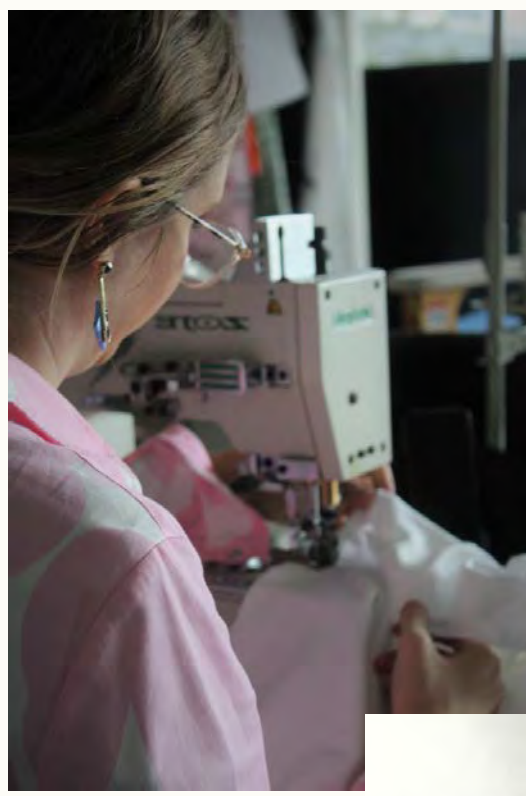
COTTON  
AUSTRALIA

*Fashion design & textile resource for the secondary classroom*



# Australian Cotton, the renewable resource of choice for *Fashion Designers*

# Exploring the *fashion* design process



*with consideration of people and planet*

# Exploring the *fashion* design process *with consideration of people and planet*

## Lesson 1

### Circular fashion

- Sourcing safe and renewable fibres

## Lesson 2

### Cotton fabrics and fibre characteristics

### Why design with Australian cotton?

## Lesson 3

### Circular fashion

- Considered design
- Plan for end of textile life

### **Bonus:**

Continuous garment life: Consumer and designer thinking for circular fashion





# What do you already know?

*Activity:*

**Draw the typical life cycle of a garment (Eg a pair of shorts)**

Now add a face at each part that you think involves people. Add a face for how many people you think are involved at each step, in the production of a simple pair of shorts.

Discuss.



# Circular economy

A circular economy is based on three principles, all led by design:

- eliminate waste and pollution,
- keep products and materials in use,
- and regenerate natural systems.

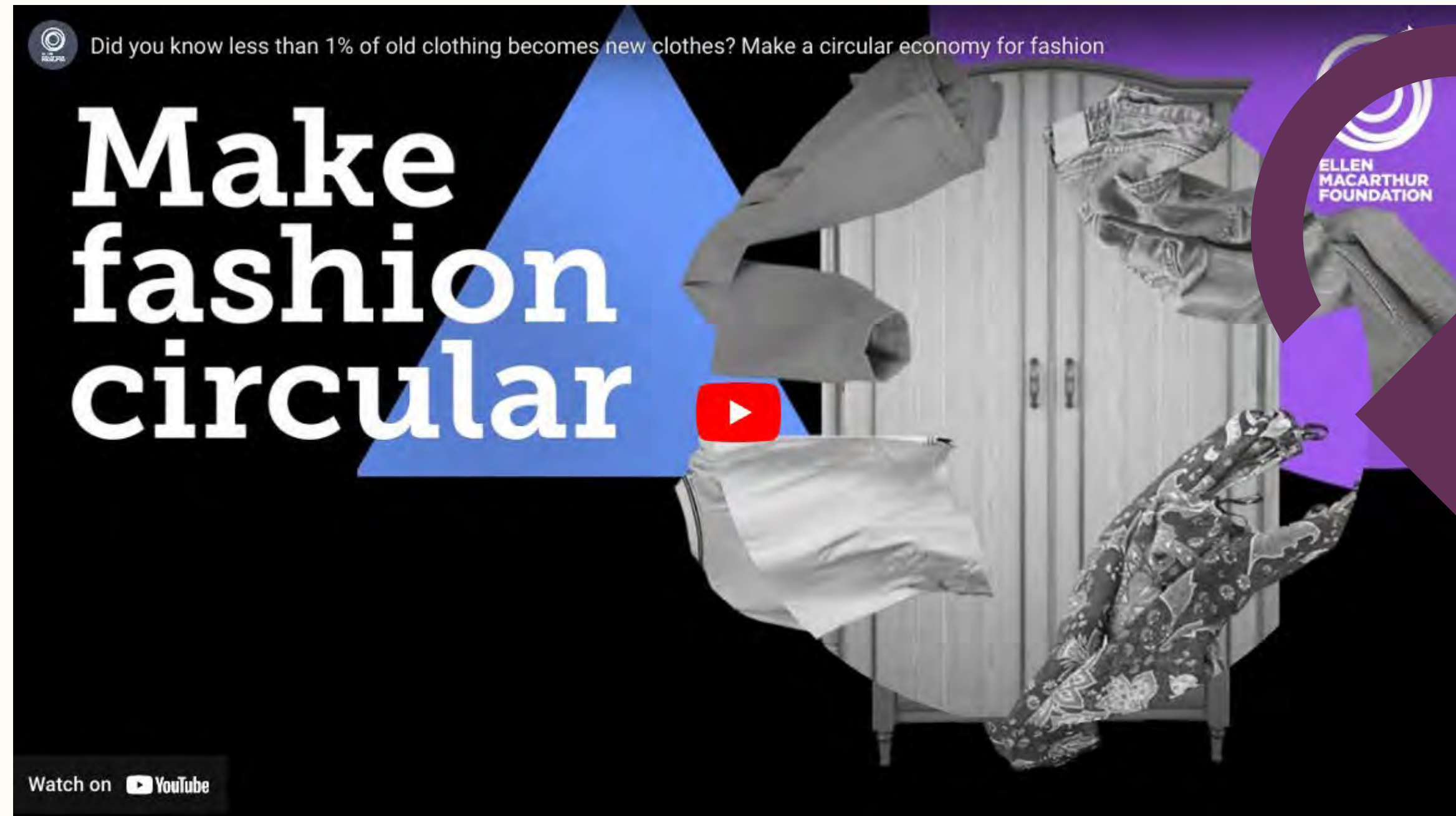


Madi & Pip fashion captured by Natalie Trainor Photography

*Activity:*

Change your diagram of the garment lifecycle so that it is circular.

# Why circular fashion?



#circulareconomy

Did you know less than 1% of old clothing becomes new clothes? Make a circular economy for fashion

<https://youtu.be/3iKHr-JnWYA>

# Circular



# fast fashion

# Circular fashion design is based on three principles, all led by design:

Eliminate waste and pollution,  
Keep products and materials in use,  
and regenerate natural systems.



Madi & Pip dress made from 100% cotton, millinery made from Australian cotton yarn and cane, 100% compostable. Captured by Natalie Trainor Photography.

# In a circular fashion system garments are:

- Made from safe and recycled or renewable inputs
- Used more
- Made to be made again



Madi & Pip dress made from 100% Australian cotton. This is a multiwear, multisize dress that is 100% compostable. Captured by Natalie Trainor Photography.

# Circular fashion design with consideration of people and planet



**Source safe and recycled or renewable fibres**



**Considered design** so that:

- your garments are made to be made again and can have multiple users consider universal design principles.
- garments are used more Design for physical and emotional durability
- waste is minimised
- your garments cut & sewn in safe and fair working conditions



**Plan for end of garment life**

# Source safe and recycled or renewable fibres

- ✓ Safe for the people that make the fibres, and live in the surrounding community
- ✓ Safe for our planet – when created, used and at end of life



# Let's look closely at safe and renewable fibres



## ✓ As a designer you can choose to use deadstock fabric

Deadstock is surplus fabric. It's common for fabric mills to over-produce and supply more than ordered by any brand. Often fashion labels may order too much fabric. Sometimes only a few metres are unused, but occasionally hundreds or even thousands of metres are left. If you design using deadstock fabric you can prolong the life of these materials, otherwise often destined for landfill or incineration.



**Local designers that use deadstock fabric:** Citizen Wolf, Madi & Pip, Wolf & Mishka, Lois Hazel, The Social Studio & Dominique Healy.

*Want to start designing with deadstock fabric now? The Fabric Store offers a wide variety of deadstock fabrics and other sustainably sourced fabrics.*

# Let's look closely at safe and renewable fibres



Madi & Pip fashion made from New Denim Project fabric, captured by Natalie Trainor Photography

✓ **As a designer you can choose to use recycled fabric**

Iris Textiles  **New Denim Project** offers upcycled, chemical-free, circular fabric derived from upcycled cotton and post-industrial textile waste.

*QLD cotton farmer,  
Raneese Lerch wears  
Madi & Pip dress made  
from New Denim Project  
fabric!*



*Want to start designing with recycled cotton fabric now? [The Fabric Store](#)*

# Let's look closely at safe and renewable fibres

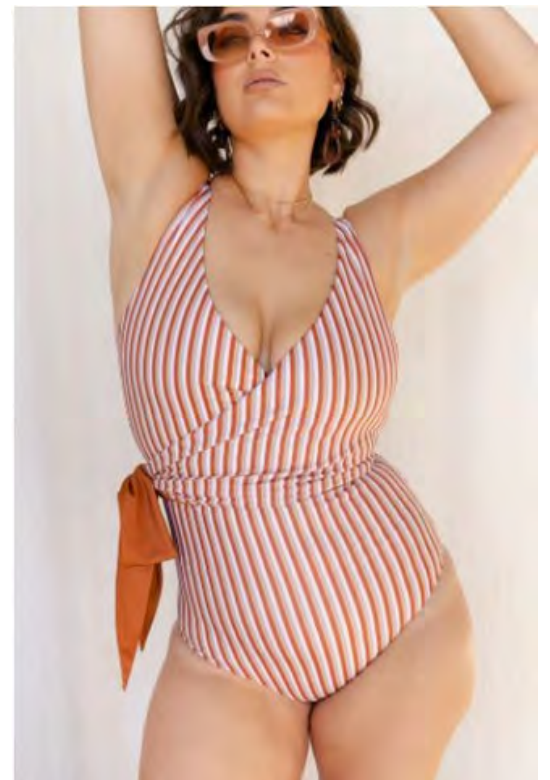
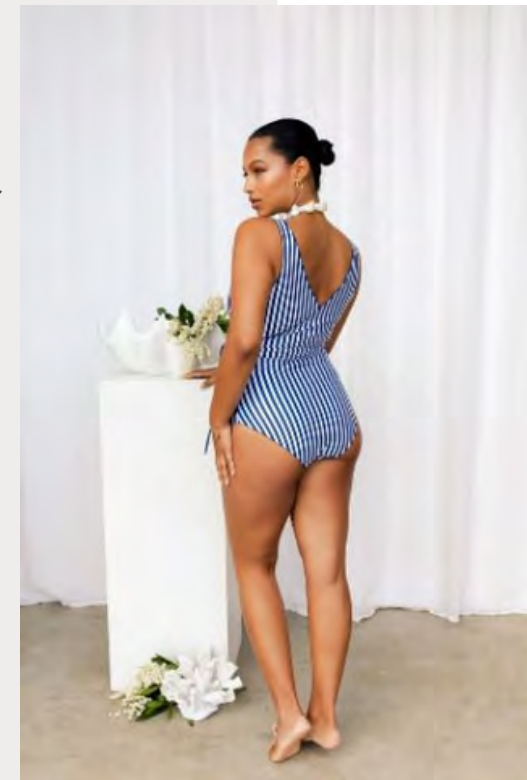


✓ **As a designer you can choose to use recycled fabric**

🔗 **Baiia swimwear** offers Australian Eco & Reversible Swimwear. Baiia swimwear is multi wear & reversible – which give the garments emotional durability. Client's love the garments for longer because of the variety; and that the garments are made from ocean waste!



*This is the cosmopolitan reversible bikini worn in a variety of ways!*



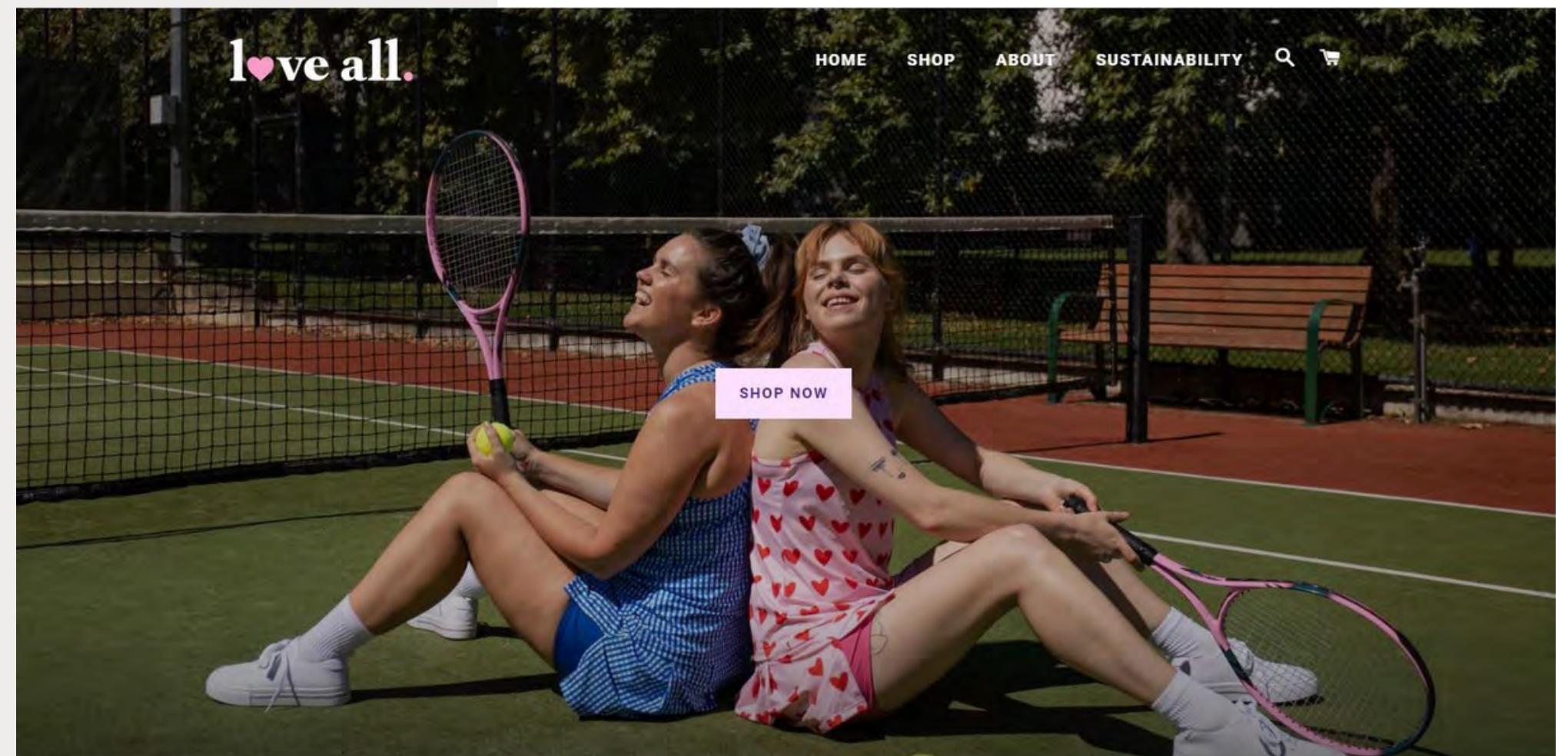
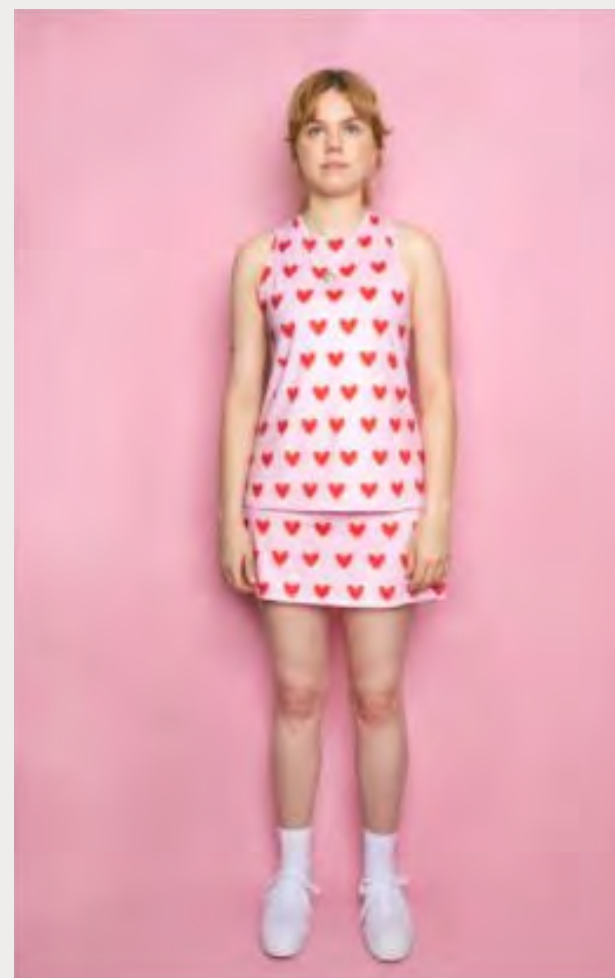
# Let's look closely at safe and renewable fibres



[www.loveall.com.au](http://www.loveall.com.au)

✓ **As a designer you can choose to use recycled fabric**


🔗 **Love All Tennis Wear** design & manufacture in Australia and utilise Repreve fibre containing recycled materials including plastic bottles, certified by Global Recycle Standard.



# Let's look closely at safe and renewable fibres

**Using recycled fabrics is one solution.** However, how does your garment contribute to our planet? To get a full understanding, we need to consider the WHOLE life cycle of a garment.

Fibre to fabric -> fabric to garment -> garment life -> garment end life? OR repurpose / recycle / regenerate



As all people wear clothing & consequently wash it, we should consider the effects of washing. **Do you know what happens when you wash fabrics made of plastic?**

# Let's look closely at safe and renewable fibres



<https://youtu.be/BqkekY5t7KY>

## The Story of Microfibers - YouTube



**The Story of Microfibers** ... Most of us wear synthetic fabrics like polyester every day. Our dress shirts, yoga pants, fleeces,...

YouTube · The Story of Stuff Project · 2 Mar 2017

# Let's look closely at safe and renewable fibres

## **Where to from here?**

We have a LOT of polyester already made and available to recycle.

But if not (recycled) polyester ...

**What are other fibre options that we should consider?**



# Let's look closely at safe and renewable fibres

## Brainstorm ideas

Reusing and recycling polyester is good. This can help us reduce the waste we already have – **but we also need to create fashion from materials that regenerate natural systems. What fibres do you know of that are safe & renewable?**



*What about...*

cotton?



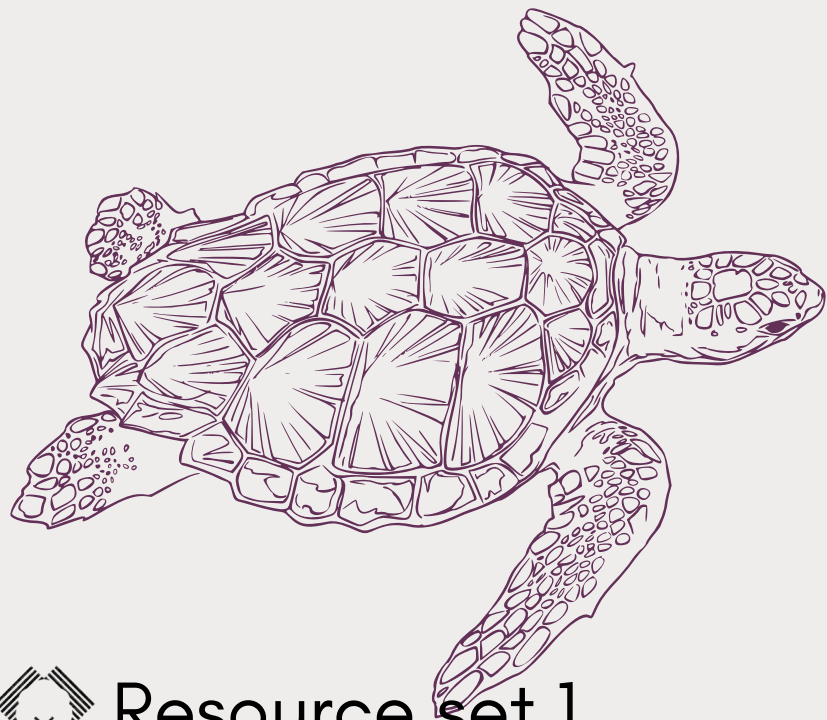
Cotton has a natural place  
in the circular economy.

Cotton is made from  
plants, not plastics.

# Can cotton help save our seas?

Research indicates that cellulosic fibres (including cotton) degrade significantly more than petroleum-based microfibres, leaving fewer microfibres behind.

Polyester microfibres show very little degradation and are expected to persist in the environment for long periods of time.



Read more: Understanding the depth of the plastics problem

Watch: Cotton Research at CSIRO in Canberra

# Circular economy

Cotton is a renewable resource that is natural and biodegradable. It breaks down quickly in soil and water, and does not contribute to micro plastic pollution.



QLD Cotton grower Raneece wears Madi & Pip fashion and millinery made from 100% cotton captured by Natalie Trainor Photography



Choosing cotton is one way to minimise the harmful impact of fashion on rivers and oceans and at the same time, support more than 100 million farming families growing cotton in 75 countries around the world.

QLD cotton farmers Mitch & Mariah Brimblecombe of Moria Farming. Mariah wears 100% Australian cotton fashion by Madi & Pip.  
Photography: Natalie Trainor

# Cotton, the regenerative fibre



The Australian cotton industry is working with the textile industry to reduce waste, with the ultimate goal of turning textiles into products that can be used back on farms. A cotton farm just outside Goondiwindi in Queensland is the site of a ground breaking trial to test whether shredded cotton products could offer benefits to cotton soil health, and a scalable solution to textile waste. Projections show 2,250kg of Carbon Dioxide equivalents (CO<sub>2</sub> e) into the atmosphere will be mitigated through the breakdown of these garments in soil rather than landfill.

Photographs, clockwise from left: Madi & Pip fashion, captured by Natalie Trainor, Cotton Australia supplied, Kelsey Drabsch @kelseydrabsch13, Cotton Australia supplied.

# Cotton, the regenerative fibre



The project team hopes the results will provide evidence for a large-scale circular solution for 100% cotton textile products in Australia, which are naturally biodegradable, renewable and recyclable.



 **Further reading**

*Farmer Sam Coulton  
spreading the shredded cotton  
products on his farm!*

# Cotton, the regenerative fibre

Goondiwindi Circular Cotton Project delivers promising results



<https://youtu.be/2bcvf58eM-o>

# Cotton, the regenerative fibre

[!\[\]\(41ede330716e633900ec1a60a7f07465\_img.jpg\) Further reading](#)

## Goondiwindi Circular Cotton Project delivers promising results

The project team will now set its sights on how best to collaborate on the way forward with a number of options already on the table:

- The Cotton Research and Development Corporation has committed to funding a three-year cotton textile composting research project by the University of Newcastle that will further investigate the effects of dyes and finishes and look at ways to pelletise cotton textiles so it can be spread on fields using existing farm machinery.
- A repeat of the trial at “Alcheringa” with Sam Coulton and his team keen to also develop a business case, purchase a shredder and potentially provide a model for employment in regional cotton communities. The trial will also move to a second farm in Gunnedah, NSW, “Kensal Green”, owned by cotton farmer Scott Morgan.
- Sheridan, together with parent company Hanes Australasia, has committed to provide additional end-of-life cotton textiles and offcuts for the trial in 2022-23.





# What do you already know about *Australian cotton?*

TURE TRUE LIE

Can you spot the lie?



- A** The Australian cotton industry is one of Australia's largest rural export earners, underpinning the viability of 50 local rural communities across Australia
- B** Australian cotton has the reputation as being the most water efficient cotton industry in the world
- C** Australian cotton is a natural fibre that can be reused, recycled or upscaled



What do you  
already know about  
*Australian cotton*

TURE TRUE LIE

Can you spot the lie?

- A** The Australian cotton industry is one of Australia's largest rural export earners, **underpinning the viability of more than 100 local rural communities across Australia!**
- B** Australian cotton has the reputation as being the most water efficient cotton industry in the world, thanks to biotechnology and advances in precision irrigation and timing.
- C** Australian cotton is a natural fibre that can be reused, recycled or upscaled. It is a strong, resilient fibre that is long lasting.



# What do you already know about *Australian cotton?*

TURE TRUE LIE

Can you spot the lie?



- A** Includes natural areas, such as native vegetation, unfarmed areas, and riparian zones, ranging from between 10-40% of the total farm area
- B** Grows an average of 5 cotton bales per hectare
- C** Is family owned and operated



# What do you already know about *Australian cotton!*

TURE TRUE LIE

Can you spot the lie?



- A** Includes natural areas, such as native vegetation, unfarmed areas, and riparian zones, ranging from between 10-40% of the total farm area
- B** Grows an average of **11 cotton bales per hectare - more than three times the global average!**
- C** Is family owned and operated



# What do you already know about *Australian cotton?*

TURE TRUE LIE

Can you spot the lie?



- A** The average Australian cotton farmer grows about 500 hectares of cotton in summer, but also produces other crops like wheat, sorghum, soybeans and canola
- B** Australian cotton farmers plant cotton every year, regardless of water availabilites
- C** Farmers are using practices to provide a healthy soil system



# What do you already know about *Australian cotton?*

TURE TRUE LIE

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A

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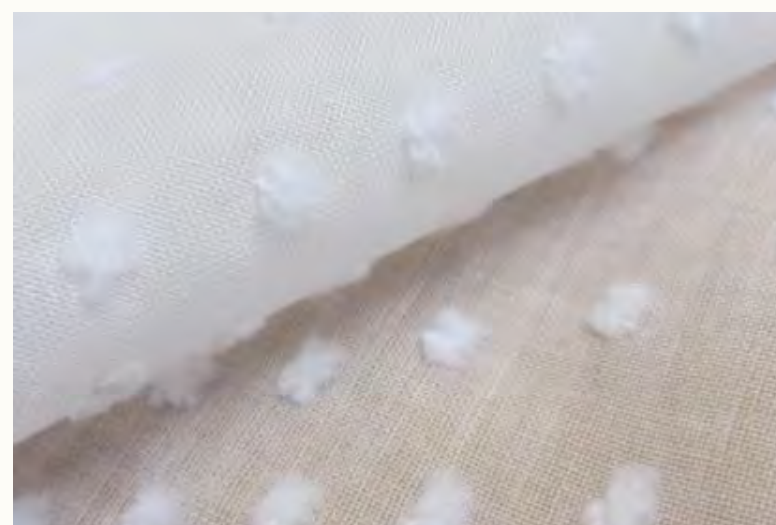
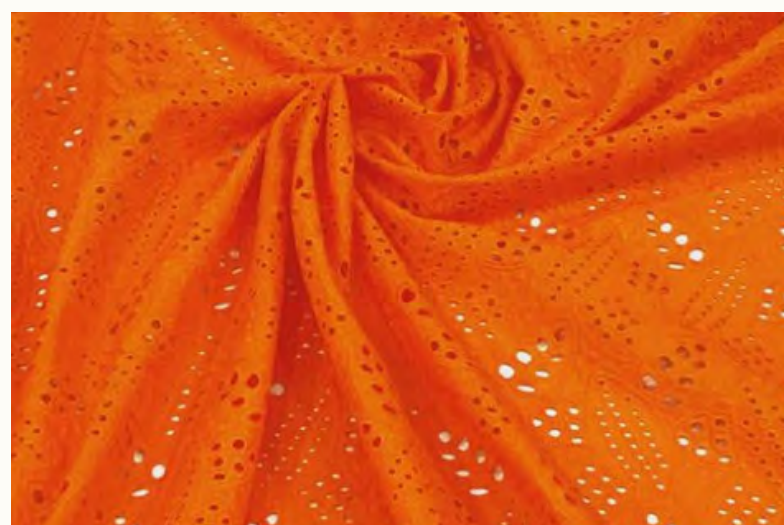
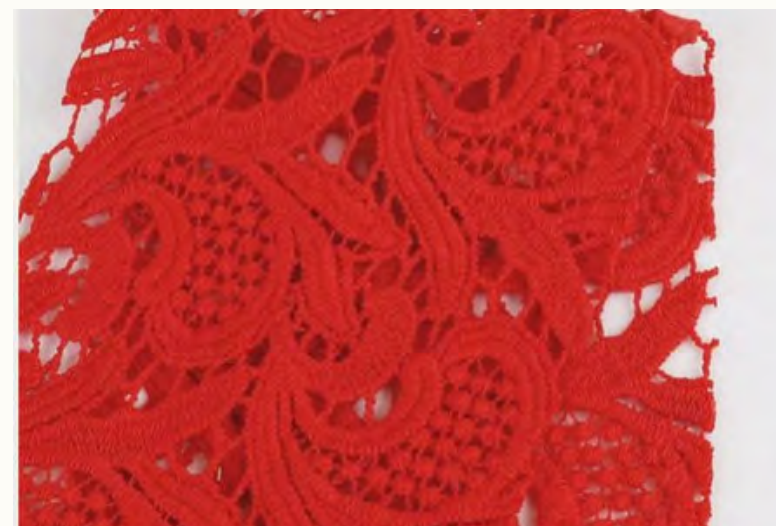
B

**Cotton is only planted when sufficient water is made available from rivers and groundwater sources through government regulated water licensing schemes. When there's no water, there's no cotton!**

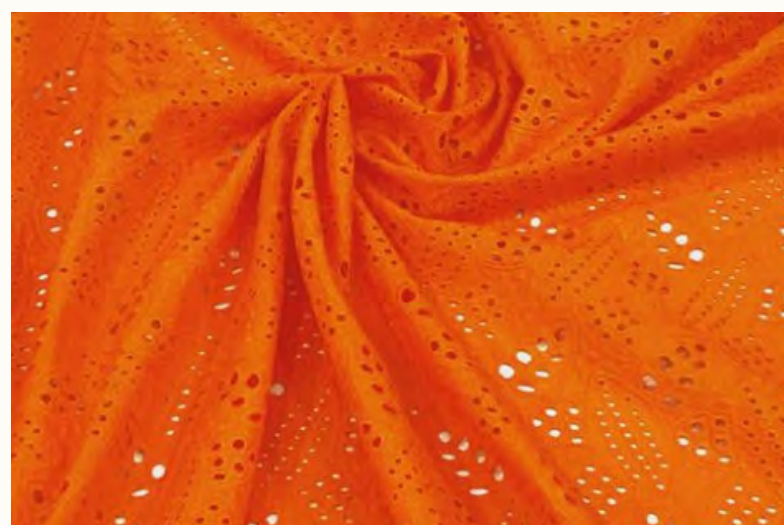
C

Farmers are using practices to provide a healthy soil system. Farmers use practices such as minimum tillage, controlled traffic farming, rotational crops, cover crops and optimising fertiliser application to optimise the health of the soil on their property.

Which of  
these fabrics  
are made  
from cotton?

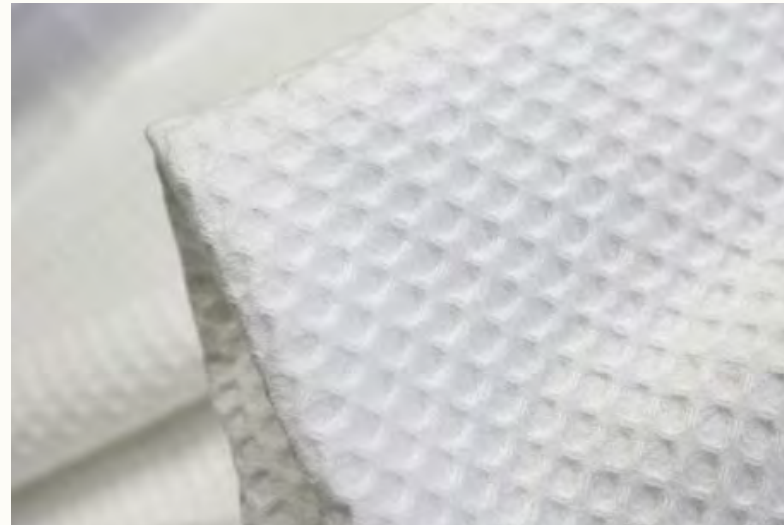


ALL of these  
fabrics are  
made from  
cotton!



# Cotton fabrics with *Texture!*

Towelling, Corduroy, Seersucker, Dotted Swiss / Dobby, Oiled, Velvet, Crinkle cotton, Chintz, Brushed cotton/  
flannelette, Broderie Anglaise/ eyelet, Lace



Top: Swiss Waffle, Swiss Dot, Broderie Anglaise

Bottom: Corduroy, Jaquard, Seersucker

# Cotton fabrics that are light - medium weight, *smooth!*

Lawn, Poplin, Shirting, Cambric / Batiste, Quilting cottons, Chambray



Left to right: Lawn, Gingham shirting, Chambray. Images: The Fabric Store  
Fashion: Madi & Pip. Dress made from Cotton Poplin Photography: Natalie Trainor

# Cotton fabrics with *structure!*

Canvas, Denim (regular and printed), Twill, Moleskin, Chino / Drill



Left: Cotton Canvas fabric. Right: Printed Denim. Fashion: Madi & Pip. Images: Madi & Pip, captured by Natalie Trainor

# Cotton fabrics that are *soft!*

Jersey (knit), Muslin, Sateen, Voile, Cheese cloth



Fabrics left to right: jersey, muslin, sateen, voile.

Images: The Fabric Store. Fashion: Madi & Pip. Dress made from Australian cotton jersey. Photography: Natalie Trainor, at Moira Farming QLD

# Cotton fabrics that have *woven patterns!*

Ticking, Gingham, Madras, Danmask, Jacquard, Dobby, Swivel



Left to right: Denmark, Jacquard, Jacquard, Gingham. Denmark, Jacquard, Waffle, Jacquard voile. Images: The Fabric Store, Alla Moda Fabric Collection & Tesutti.

# Fibre characteristics of cotton for *fashion design!*

- Hypoallergenic (does not irritate sensitive skin or cause allergies)
- Soft, achieved by tightly spinning the ends of cotton fibres into the yarn
- Absorbent- great for dyeing as it retains colour well.
- Does not produce static electricity
- Stains can be easily removed
- Not easily damaged by sunlight
- Breathable because of its unique fibre structure
- Good conductor of heat
- Easy to handle and sew
- Durable
- Easy care: machine-washable



Cotton is made into virtually every type of clothing, from underwear, to dresses, shirts, jeans, jackets and coats!

It isn't only the fashion industry that utilises cotton either. You will find a lot of home furnishings and medical supplies are made from cotton.

*It's no wonder cotton is perhaps the most popular natural fibre in the world, used since 5 000 B.C.E!*



Why design with  
*Australian cotton?*



# Why design with *Australian cotton?*



## Commitment to sustainability

Australian cotton growers are working towards making Australia a global leader in sustainable cotton production. Growers are accountable for the actions and impacts of their industry and share their progress and goals. Since 1992, producing a bale of irrigated cotton now takes: 48% less water, 34% less land and 97% less insecticides.

## Premium quality

Our efficient and careful crop management, and modern farming technology delivers high quality fibres that offer spinners low breakages and stoppages, good throughput efficiency and uniform runs of yarn. Our long fibre staple length means designers create a stronger garment or textile product out of less yarn. Fewer fibres in turn mean softness and a more luxurious feel.

## Alignment of values & transparency

The Australian cotton industry is a genuine and open one. The industry is transparent, accountable and farmers actively contribute to their community; they shop local and regularly support local needs. More than 90% of cotton farms are family owned; it's great to know that your designs can support other families.



Notes: To access annual and [sustainability reports](https://cottonaustralia.com.au/sustainability-reports) visit [cottonaustralia.com.au](https://cottonaustralia.com.au)

# Commitment to sustainability

## AUSTRALIAN COTTON SUSTAINABILITY FRAMEWORK PLANET. PEOPLE. PADDOCK.

**The Australian cotton industry cares about people and planet.**

The 'Planet. People. Paddock.' framework directs the Australian cotton industry's efforts for the next decade and is targeted at on-farm cotton production. The framework recognises sustainability is integral to the industry's future and provides a path for the entire industry to stay in business.

The nine priority sustainability topics in this framework are:

- + **Planet:** water; carbon; biodiversity; pesticides.
- + **People:** quality of work life; workplace safety; wellbeing and social capital.
- + **Paddock:** productivity; profitability.





The Brownlie family from Theodore

# Commitment to sustainability

## My BMP

Better Cotton brings together farmers, ginner, manufacturers, retailers, brands, civil society and grassroots organisations in a unique global community committed to developing Better Cotton as a sustainable mainstream commodity.

The Better Cotton Standard is a set of on-farm best practices covering social and environmental issues like pesticides, water, soil health and wellbeing.

In the 2017/18 cotton season, two-million Better Cotton farmers across 21 countries produced 5.1 million metric tonnes of Better Cotton lint, accounting for 19% of global cotton production.

'Our mission is to help cotton communities survive and thrive, while protecting and restoring the environment. Because we know the world doesn't just need cotton, it needs Better Cotton.'



Fashion designers often desire to source fabric that is **Better Cotton**. Better Cotton is the largest cotton sustainability program in the world. Cotton Australia joined the BCI (Better Cotton Initiative) in 2014, with myBMP. Fully accredited myBMP Australian cotton growers qualify as a Better Cotton grower.

# How do we produce a premium cotton fibre?

- World class plant breeding and variety selection
- Efficient and careful management of the crop
- Picked with the latest round bale technology to minimise contamination and maximise fibre disturbance – no hand picking
- Gently ginned with state of the art equipment and best practice standards
- Australian cotton is graded through modern certified classing facilities that participate in the International Cotton Advisory Committee CSITC Round Trials to ensure the highest standards.
- The collaborative effort of all in the fibre supply chain





# Collaboration & accountability

The Australian cotton industry manages the fibre quality at every step- from pre-planting to processing. The grower, manager, agronomist, ginner, classer, merchant, shipper and retailer all work together; each has a vast knowledge of what aspects of fibre quality they can influence and an understanding of the needs and constraints of the other participants in the fibre supply chain.



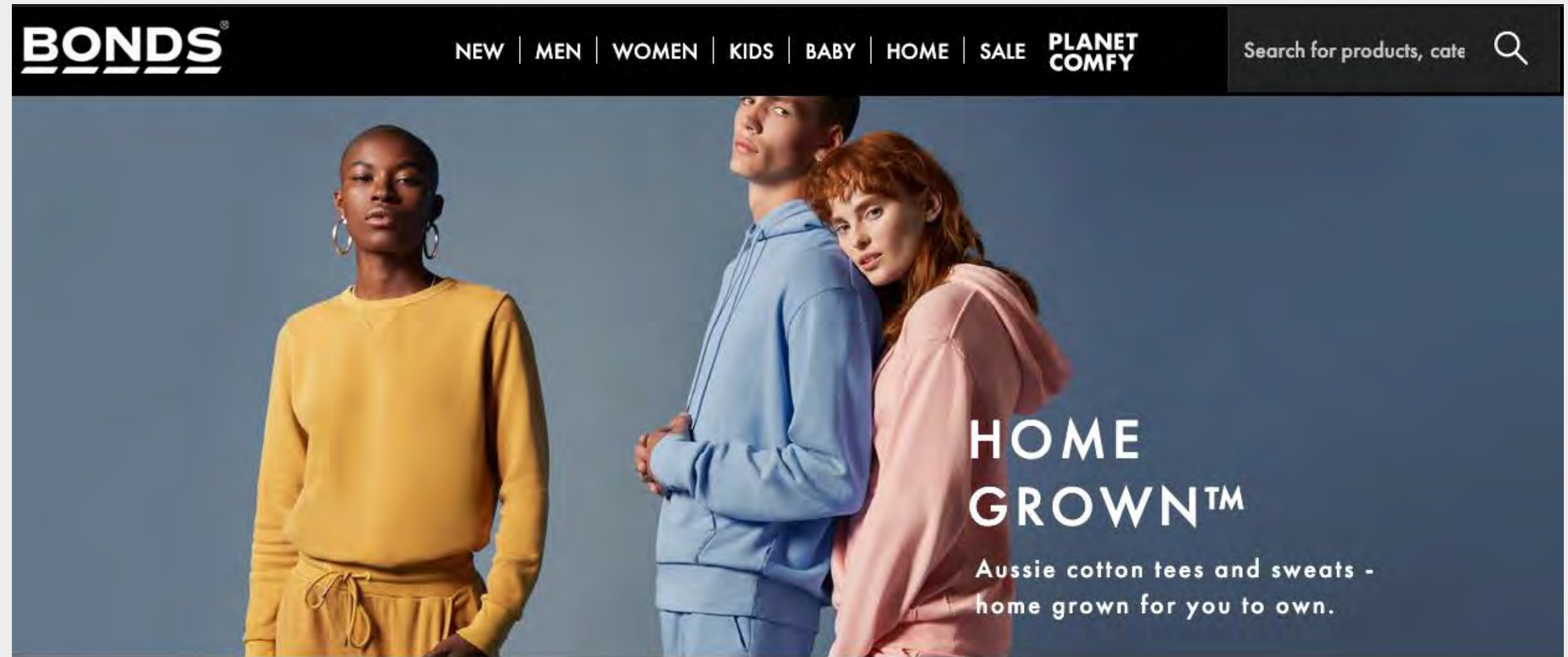
# Why design with *Australian cotton?*



**“Country Road** has proudly partnered with Landcare Australia to support the regeneration of Australian farmlands, with a focus on increasing biodiversity in cotton growing regions”

# Why design with *Australian cotton?*

‘By partnering with Australian Cotton, we source sustainable raw fibres in a way that has increased water efficiency by 40% over the last decade’  
Bonds



“We are passionate about farming, rural communities and natural fibres, of which we believe Australia produces some of the best in the world” Love Thy Farmer

# Why design with *Australian cotton?*

“Exclusively working with Australian Super Cotton, they transparently and meticulously produce each roll of fabric with the utmost care for quality and the environment, right here in Australia.”

[farmtohanger.com](https://farmtohanger.com)

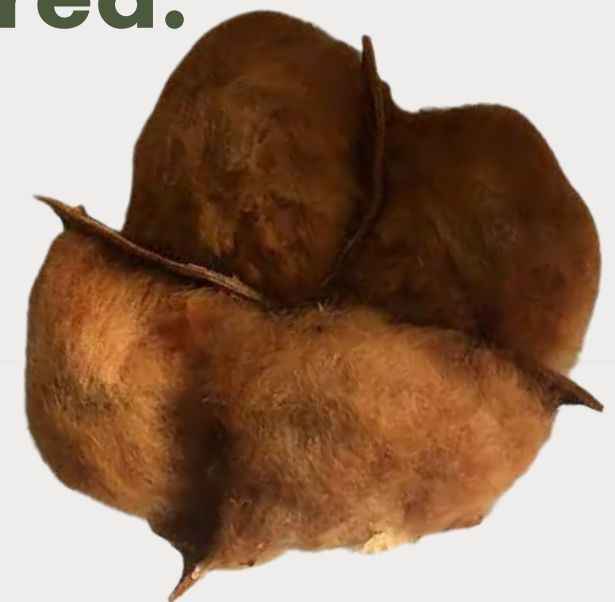


Why design with  
*Australian cotton?*

"We never considered anything else"

**BIDSTRUP**  
www.bidstrupcotton.com

The Bidstrup family planted their first **naturally coloured** cotton in the spring of 1993. They designed and produced men's and women's garments made completely in Australia from locally grown cotton. **Garments contained no dyes as the cotton was naturally coloured.**



# Why design with *Australian cotton?*

Bidstrup Farming Co garments were high quality – and featured naturally coloured cotton! Designs attracted customers locally and abroad, Bidstrup was especially popular in Korea.



Watch CSIRO scientists and learn about their further research of coloured cotton and other innovations. ABC News

# Why design with *Australian cotton?*



“You can always feel the quality of 100% Australian cotton. It’s some of the highest quality cotton in the world. It’s soft to the touch and it’s a breathable fabric you’ll feel good in all day.”



[www.sussan.com.au](http://www.sussan.com.au)

# Why design with *Australian cotton?*



"I love that Australian cotton is mostly grown by families, dedicated farmers that are passionate about their land and community. We can see this through their active commitment to sustainability and research, and how they support their local businesses and causes. It is an honest industry that's committed to best practice." Emma Bond of Madi & Pip

[www.madiandpip.com.au](http://www.madiandpip.com.au)

# Why design with *Australian cotton?*



This short feature film is the story of how a pair of Australian cotton socks are made, from the field right through to the end product. It's told by the industry's characters, and ends with Raffaele Pietrolungo explaining why Compu Knit Hosiery has pride in using Australian cotton.

<https://youtu.be/t6plTYrBth4>

# Circular

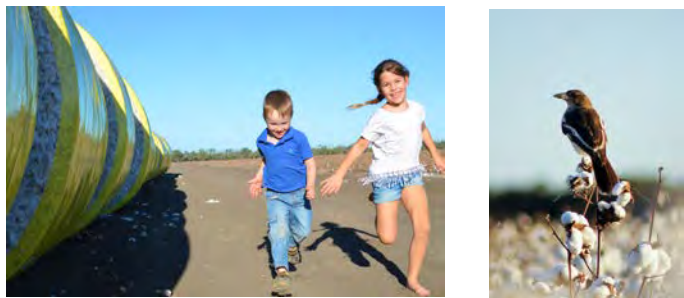


# fast fashion

Source safe and recycled or renewable fibres

- ✓ Safe for the people that make the fibres, and live in the surrounding community
- ✓ Safe for our planet – when created, used and at end of life

Cotton has a natural place in the circular economy. Cotton is biodegradable, renewable and recyclable and it doesn’t have the microplastics problem associated with synthetic fabrics. It is also able to be regenerated on cotton farms that have sustainability programs in place, such as the myBMP program in Australia.



Plan for end of garment life

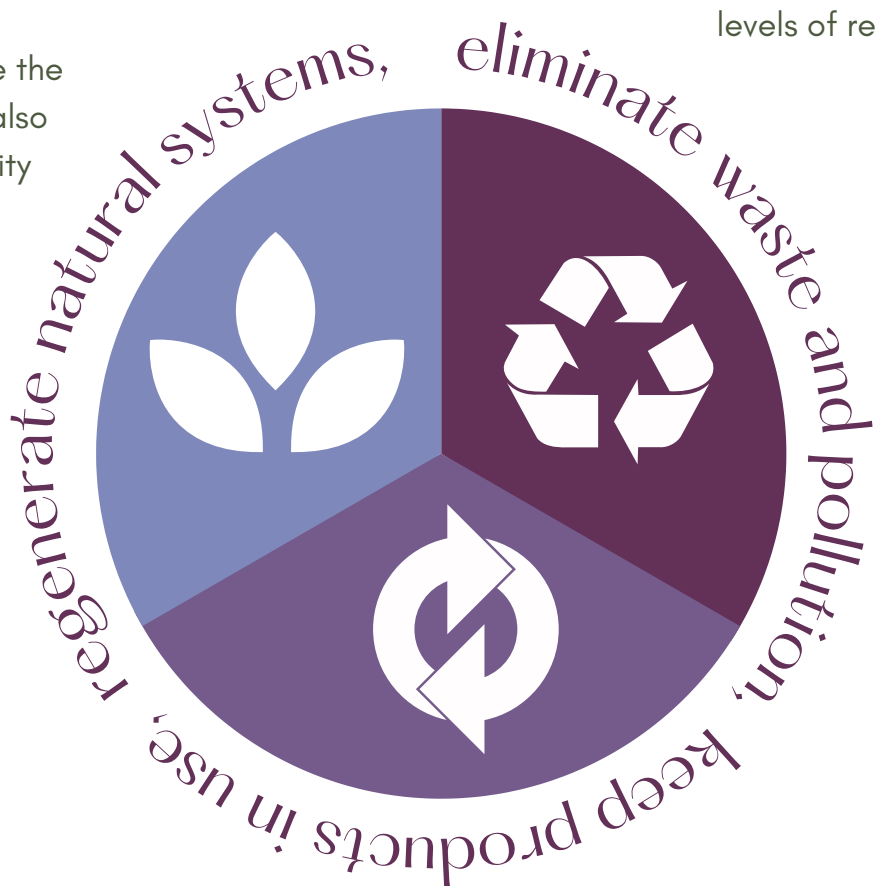
When sourcing all materials consider, is there a system for re-collecting; (offcuts during manufacture and the garment at end of garment life). If you are going to such measures – be sure to share your process and systems. Be proud of the measures you are taking. Post consumer waste is often far removed from the consumer’s mindset. This storytelling can contribute to the Emotional durability of your designs. For ideas see the website of Australian fashion label A.BCH



Considered design so that:

- your garments are made to be made again and can have multiple users, consider universal design principles.

Today less than 1% of clothes are recycled into new clothes. This is due to clothing being created without considering its ability to be recycled, for example using complex material blends or hard to separate components. This limits the incentives to invest in the collection and recycling infrastructure, making high levels of recycling difficult to achieve.



- garments are used more.

Design for physical and emotional durability.

“Emotional durability depends on a user valuing a product because of its timelessness, rarity, history, and meaning,”  
Circular Design for Fashion, 2022



- waste is minimised.

Design so that there is less fabric waste utilising zero waste patternmaking or co-design pieces, so that a second garment (or accessory) can be made from the negative shapes of the first design’s pattern pieces.



- your garments cut & sewn in safe and fair working conditions.

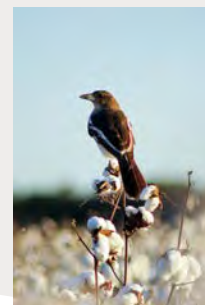
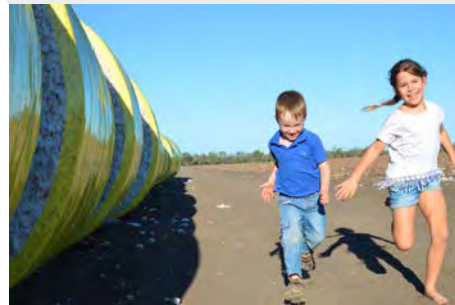
Manufacturing in Australia? Look for Ethical Clothing Australia accredited manufactures.



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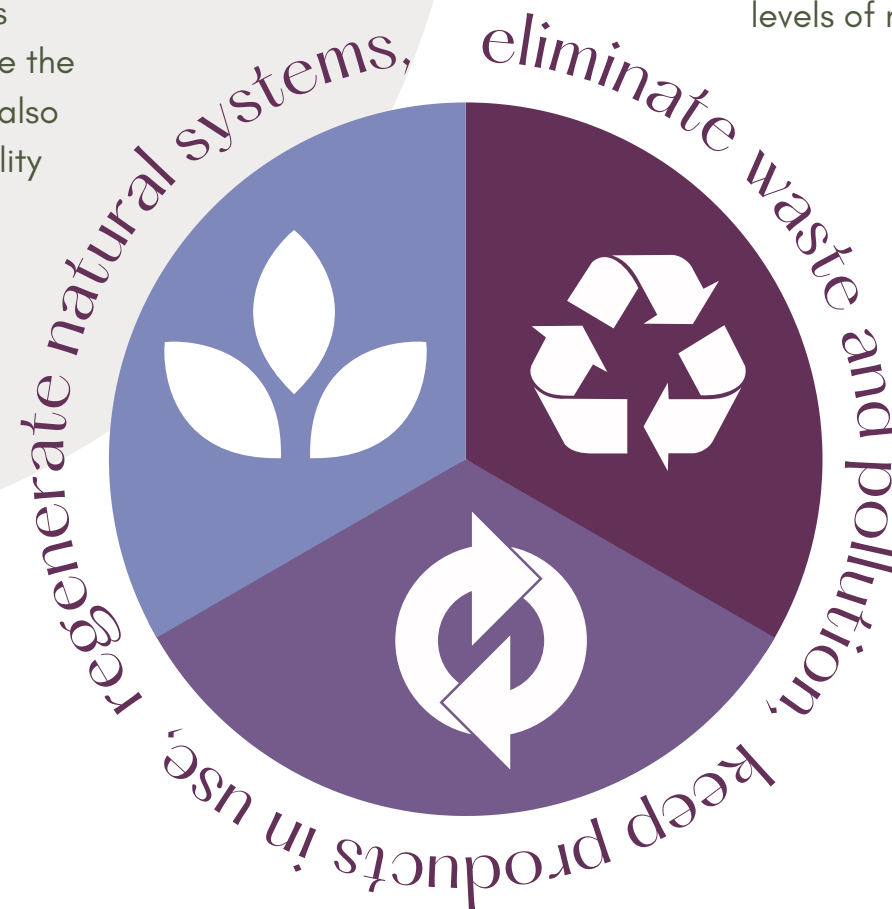
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Left: The New Denim Project, 100% cotton recycled fabric

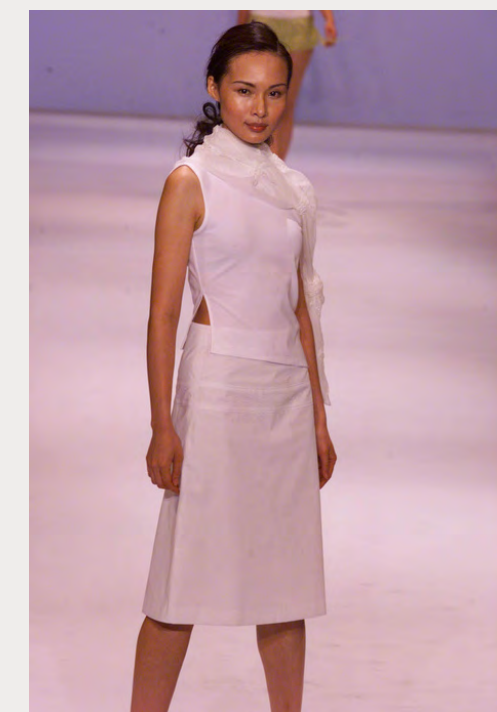
[www.thenewdenimproject.com](http://www.thenewdenimproject.com)

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Design for physical and emotional durability.

**“Emotional durability depends on a user valuing a product because of its timelessness, rarity, history, and meaning,”**

Circular Design for Fashion, 2022



- waste is minimised.

Design so that there is less fabric waste utilising **zero waste patternmaking** or **co-design pieces**, so that a second garment (or accessory) can be made from the negative shapes of the first design's pattern pieces.



- your garments cut & sewn in safe and fair working conditions.

Manufacturing in Australia? Look for Ethical Clothing Australia accredited manufactures.

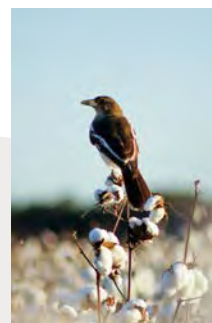


[ethicalclothingaustralia.org.au](https://ethicalclothingaustralia.org.au)

## Source safe and recycled or renewable fibres

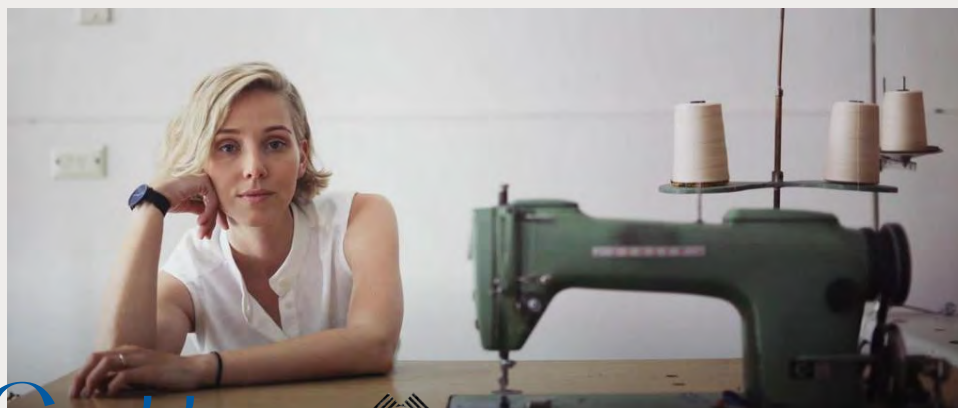
- ✓ Safe for the people that make the fibres, and live in the surrounding community
- ✓ Safe for our planet – when created, used and at end of life

Cotton has a natural place in the circular economy. Cotton is biodegradable, renewable and recyclable and it doesn't have the microplastics problem associated with synthetic fabrics. It is also able to be regenerated on cotton farms that have sustainability programs in place, such as the myBMP program in Australia.



## Plan for end of garment life

When sourcing all materials consider, is there a system for re-collecting; (offcuts during manufacture and the garment at end of garment life). If you are going to such measures – be sure to share your process and systems. Be proud of the measures you are taking. Post consumer waste is often far removed from the consumer's mindset. This storytelling can contribute to the Emotional durability of your designs. For ideas see the website of Australian fashion label A.BCH



## Considered design so that:

- your garments are made to be made again and can have multiple users, consider universal design principles.

Today less than 1% of clothes are recycled into new clothes. This is due to clothing being created without considering its ability to be recycled, for example using complex material blends or hard to separate components. This limits the incentives to invest in the collection and recycling infrastructure, making high levels of recycling difficult to achieve.

- garments are used more.

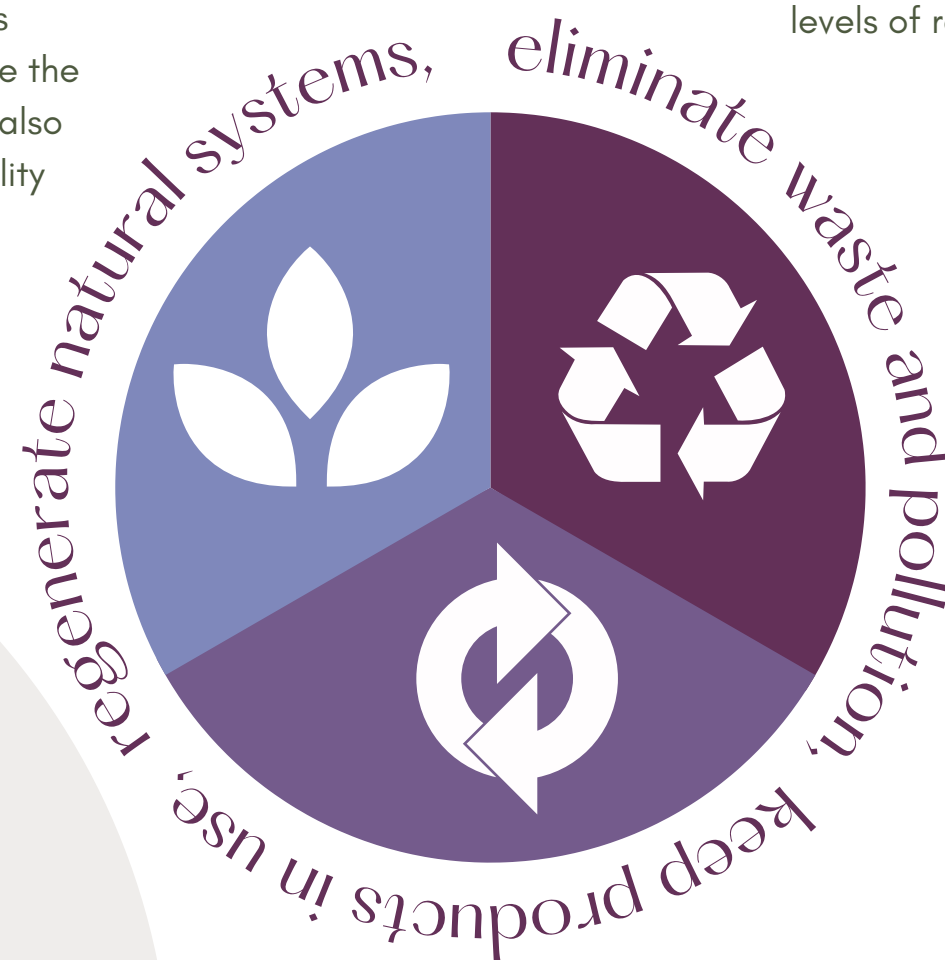
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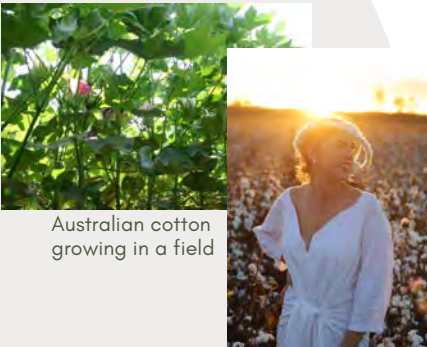
 [www.abch.world](http://www.abch.world)

# Classroom resources

- Circular fashion worksheet A4

Circular fashion design is based on three principles, all led by design:

Eliminate \_\_\_\_\_ and \_\_\_\_\_  
Keep products and materials \_\_\_\_  
and \_\_\_\_\_ natural systems.



Australian cotton growing in a field

Australian cotton fashion & millinery, Madi & Pip, captured by Natalie Trainor

In a circular fashion system garments are:

An example of this is:

**Made from safe and recycled or renewable inputs.**

Australian cotton because \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Deadstock fabric because \_\_\_\_\_  
\_\_\_\_\_

Recycled fabric but if you are using recycled polyester you should consider that \_\_\_\_\_  
\_\_\_\_\_

**Used more.**

Design for emotional durability as well as physical durability. This can be created by \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Made to be made again**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Classroom resources

- Why design with Australian Cotton A4 worksheet

## Why do fashion designers choose Australian cotton?

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Clockwise from left: Sussan, Madi & Pip, Country Road.

## Cotton characteristics and properties for *fashion design*

Characteristic	Benefit for fashion design
Absorbent	Great for dying and print design, as cotton takes colour well and remains vivid for a long time.
Hypoallergenic	<hr/>
Soft	<hr/>
Does not produce static electricity	<hr/>
Stains can be easily removed	<hr/>
Not easily damaged by sunlight	<hr/>
Breathable	<hr/>
Good conductor of heat	<hr/>
Easy to handle and sew	<hr/>
Durable	<hr/>
Easy care: machine-washable	<hr/>

# Classroom resources

- Cotton fabric types A4 worksheets & teachers' resource

Cotton fabric types for *fashion design*  
Can you find examples of cotton fabrics for each category? Find your own fabric swatches, or use our images provided.

Cotton fabrics with *structure*

Cotton fabrics with *Texture*

Cotton fabrics that are *soft*

Cotton fabrics with *woven patterns*

Cotton fabrics that are light-medium weight and *smooth*

Cotton fabrics I would like to design with:  
  
Why I like these:

Cotton fabric types for *fashion design*

Fabric samples

Fabrics

Towelling, Corduroy, Seersucker, Dotted Swiss / Dobby, Oiled, Velvet, Crinkle cotton, Chintz, Brushed cotton/ flannelette, Broderie Anglaise/ eyelet, Lace

Lawn, Poplin, Shirting, Cambric / Batiste, Quilting cottons, Chambray

Jersey (knit), Muslin, Sateen, Voile, Cheese cloth

Ticking, Gingham, Madras, Danmask, Jacquard, Dobby, Swivel

Canvas, Denim (regular and printed), Twill, Moleskin, Chino / Drill

Cotton fabric types for *fashion design*  
Can you find examples of cotton fabrics for each category? Find your own fabric swatches, or use our images provided.

Cotton fabrics with *structure*

Cotton fabrics with *Texture*

Cotton fabrics that are *soft*

Cotton fabrics with *woven patterns*

Cotton fabrics that are light-medium weight and *smooth*

Cotton fabrics I would like to design with:  
  
Why I like these:

ANSWERS - Teacher resource


Canvas, Denim (regular and printed), Twill, Moleskin, Chino / Drill

Towelling, Corduroy, Seersucker, Dotted Swiss / Dobby, Oiled, Velvet, Crinkle cotton, Chintz, Brushed cotton/ flannelette, Broderie Anglaise/ eyelet, Lace

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Ticking, Gingham, Madras, Danmask, Jacquard, Dobby, Swivel

Lawn, Poplin, Shirting, Cambric / Batiste, Quilting cottons, Chambray

Wrapped in Cotton  Resource set 1

# Classroom resources

- Circular Fashion Design A3 poster
- Circular Fashion Design A3 worksheet

**Source safe and recycled or renewable fibres**

✓ Safe for the people that make the fibres, and live in the surrounding community

✓ Safe for our planet – when created, used and at end of life

Cotton has a natural place in the circular economy. Cotton is biodegradable, renewable and recyclable and it doesn't have the microplastics problem associated with synthetic fabrics. It is also able to be regenerated on cotton farms that have sustainability programs in place, such as the myBMP program in Australia.



**Plan for end of garment life**

When sourcing all materials consider, is there a system for re-collecting; (offcuts during manufacture and the garment at end of garment life). If you are going to such measures – be sure to share your process and systems. Be proud of the measures you are taking. Post consumer waste is often far removed from the consumer's mindset. This storytelling can contribute to the Emotional durability of your designs. For ideas see the website of Australian fashion label A.BCH



**Considered design** so that:

- your garments are made to be made again and can have multiple users, consider universal design principles.

Today less than 1% of clothes are recycled into new clothes. This is due to clothing being created without considering its ability to be recycled, for example using complex material blends or hard to separate components. This limits the incentives to invest in the collection and recycling infrastructure, making high levels of recycling difficult to achieve.



- your garments cut & sewn in safe and fair working conditions.

Manufacturing in Australia? Look for Ethical Clothing Australia accredited manufactures.



- garments are used more.

Design for physical and emotional durability.

"Emotional durability depends on a user valuing a product because of its timelessness, rarity, history, and meaning," Circular Design for Fashion, 2022



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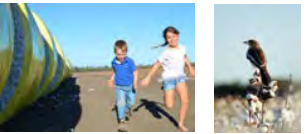
**Source safe and recycled or renewable fibres**

✓ Safe for the people that make the fibres, and live in the surrounding community

✓ Safe for our planet – when created, used and at end of life

Cotton is Hypoallergenic (does not irritate sensitive skin or cause allergies). This makes it safe to wear! Cotton is renewable as it is grown from a \_\_\_\_\_

Cotton has a natural place in the circular economy. Cotton is biodegradable, renewable and recyclable and it doesn't have the microplastics problem associated with synthetic fabrics.



**Plan for end of garment life**

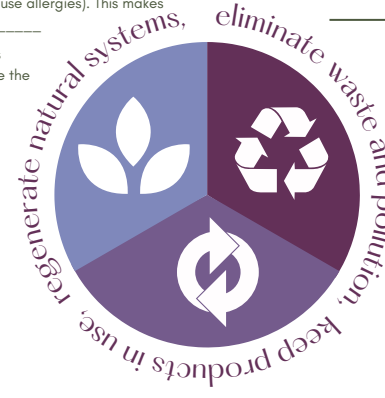
When sourcing all materials consider, is there a system for re-collecting; (offcuts during manufacture and the garment at end of garment life). If you are going to such measures – be sure to share your process and systems. Be proud of the measures you are taking. Post consumer waste is often far removed from the consumer's mindset. This storytelling can contribute to the Emotional durability of your designs. For ideas see the website of Australian fashion label A.BCH



**Considered design** so that:

- your garments are made to be made again and can have multiple users, consider universal design principles.

Today less than \_\_\_\_% of clothes are recycled into new clothes. This is due to clothing being created without considering its ability to be recycled. Thoughtful designers consider the garments end of life when designing. Garments can be designed so that they can be made into new items by: \_\_\_\_\_



- your garments cut & sewn in safe and fair working conditions.

Manufacturing in Australia? Look for Ethical Clothing Australia accredited manufactures.



- garments are used more.


Design for physical and emotional durability.

Emotional durability is dependant on \_\_\_\_\_

As a fashion designer, I can ensure my garments are designed for emotional durability by \_\_\_\_\_

- waste is minimised.

List four ideas to minimise waste during production: \_\_\_\_\_



# Additional resources

- Continuous garment life A3 pdf

## Reuse

Second hand fashion is more affordable than new, and ethically responsible.

Buying an item secondhand replaces the need to manufacture a new item, reducing its carbon footprint by 82%

Recommerce extends average product life by 1.7 x based on average length of second hand ownership

33 Million consumers bough secondhand apparel for the first time in 2020 Of these first time buyers 76% intend to increase their spend on second hand in the next five years.

*Where can you buy preloved fashion?*

Charity stores, Facebook marketplace, clothing swaps, Depop, SWOP clothing exchange, The clothing exchange, Her wardrobe, Circolareclub

## Repair

*Make do and mend!*

Can you repair yourself? Can you enlist the help of a family member? Friend? Artisan or technician?

## Remake

*Can you make into a new garment?*

*Can you make into an item of use to you in your*

*home?* Lydia Pearson and Shilo Engelbrecht collaborate repurposing vintage textiles shilolydia.myshopify.com

## Recycle

*What can you do with your clothes that are no longer suitable for use as clothing?*

Donate to **Up Parel Recycling**. They even accept socks and shoes! [upparel.com.au](http://upparel.com.au)



The Australian cotton industry is working with the textile industry to reduce waste, with the ultimate goal of turning textiles into products that can be used back on farms. The industry invests in research and development, and is part of the Cotton Converts group that's working to turn textile waste problems into solutions.

## Compost

When your garment can no longer be used, remade or upcycled; can components regenerate natural systems? Natural fibres will naturally biodegrade. Before composting textile items you need to remove any components that are not biodegradable, for example plastic and metal fasteners, synthetic interfacing.

## Multiple users

McKinsey and Global Fashion Agenda found that rental extends a product's life by 1.8x, based on the average number of rentals during a product's lifetime, ultimately contributing to lowering fashion's greenhouse gas emissions.

*Local options for fashion designers:*

RNTR

## Repair

*Will you offer repair services for your customers like these designers do?*

Birkenstock	Patagonia	Arnsdorf
Nudie Jeans	Ganni	Jillian Boustred
Madi & Pip	Citizen Wolf	Kalaurie
A.BCH	R M Williams	A hop and a skip

## Reuse

*Will you promote resale or rental?*

Second hand fashion is more affordable than new, and ethically responsible. Research shows that resale marketplaces attract new customers who lack access to the brand and often go on to buy full priced items as well. Luxury is particularly well-suited to resale because it plays into the narrative of heritage quality that lasts generations — which pairs well with the new consumer attention on sustainability.

The second-hand clothing market is growing 11 times faster than retail.

60% of retailers have or are open to offering secondhand to their customers.

## Compost

Cotton is natural & biodegradable. It will naturally compost! If you want your fashion to be biodegradable, be mindful to not use hidden plastics in design- for example, interfacing and fasteners.

## Remake

*Can you make excess stock or waste into a new garment?*

## Recycle

*What can you do with your designs that are no longer suitable for use as clothing?*

Donate to **Up Parel Recycling**. You can partner and show your customers your values, by rewarding your customers that donate.

**Thread Together** accepts new clothing and redistributes to those in need. [threadtogether.org](http://threadtogether.org)  
**MOO** sells business cards made from tshirts and tshirt offcut cotton!

Online  
exhibit



<https://artsandculture.google.com/story/JQWx9L77xCPwlg>

## Videos of our

*Australian cotton  
industry*

Animation of our local cotton industry

[https://fb.watch/dPJ8FYZYX\\_/](https://fb.watch/dPJ8FYZYX_/)

I love Australian Cotton

<https://youtu.be/4kmPEE2yTF4>

Australian cotton from seed to sock

<https://www.youtube.com/watch?v=t6plTYrBth4>

Balonne Shire Mayor, Samantha O'Toole, explains why Aussie cotton is important for her region

<https://www.youtube.com/watch?v=Tw8TQYjFdGk>

Goondiwindi Circular Cotton Project

<https://youtu.be/2bcvf58eM-o>

Cotton products and their uses

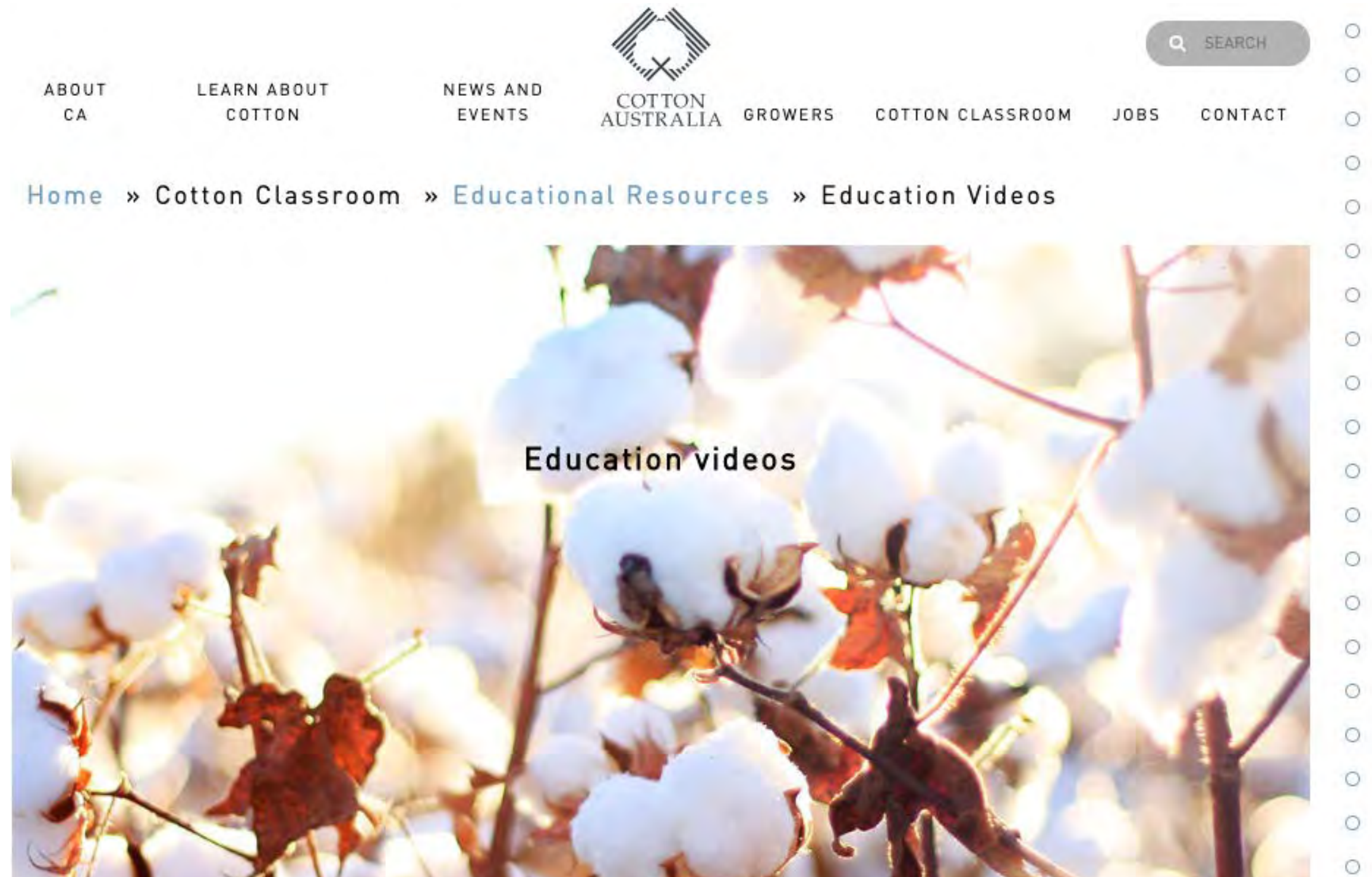
<https://www.youtube.com/watch?v=3TW3osxL1fM>

Meet A Grower – Alexandria Galea, Emerald, QLD

[https://www.youtube.com/watch?v=iB0mld3nZ\\_g](https://www.youtube.com/watch?v=iB0mld3nZ_g)

# Videos of our

*Australian cotton  
industry*



<https://cottonaustralia.com.au/education-videos>

# Education kits

*Cotton Australia*

Cotton Australia has two additional Education Kits available for students and school classroom teachers: the Cotton Education Kit (digital resource) and the Cotton Sampler Education Pack (physical resource)

Visit <https://cottonaustralia.com.au/education-kit>

## EDUCATION KIT

Cotton Australia has two Education Kits available for students and school classroom teachers: the Cotton Education Kit (digital resource) and the Cotton Sampler Education Pack (physical resource that we can post upon request - to Australian locations only. This is not available for individual home school educators, however, consideration will be given to home schooling hubs/groups that service 15 or more home schooling families).

Whether it is ideas for incorporating cotton contexts in the classroom, great teaching resources, or information for a school project, all you need to know about cotton is right here.

Designed for all teachers and high school students, the 10-chapter digital Cotton Education Kit is linked to dynamic resources such as video, websites, research, and case studies. This kit has been mapped to the Australian Curriculum for Years 7-10, and targeted outcomes for Years 11-12 from all state & territory curricula in Australia. A list of themes is provided for teachers at the back of each chapter as a quick guide to linking the content to their unit of work or syllabi in their state or territory.

Click here to download the [Cotton Education Kit Curriculum Mapping Guide](#).

Teachers can also access a [comprehensive photo gallery](#) showcasing the cotton production process.

Cotton Australia's 360degree VR film is interactive on most digital devices and can be accessed by clicking [here](#).



## Useful links

*Sustainability*

### Fashion Revolution

Fashion Revolution is the world's largest fashion activism movement, campaigning for a fashion industry that values people and the planet over profit and growth. We are a truly people-powered movement, working together in communities around the world to create positive and lasting change. <https://www.fashionrevolution.org/>

Clare Press – Podcaster, sustainable fashion communicator & founder of @thewardrobecrisis <https://thewardrobecrisis.com/about>

### Ellen Macarthur Foundation

We develop and promote the idea of a circular economy. We inspire and work with business, academia, policymakers, and institutions across the globe. <https://ellenmacarthurfoundation.org/>

### The Fashion for Good Museum

An interactive fashion museum for the future of fashion, where we tell the stories behind the clothes you wear and how your choices can have a positive impact on people and our planet. <https://fashionforgood.com/museum/>

## Useful links

*Sustainability*

### Fashion on climate

<http://www2.globalfashionagenda.com/initiatives/fashion-on-climate/#/>

### Fashion recommence:

The world's largest online thrift store has published their tenth Annual Fashion **Resale** Market and Trend **Report**.

<https://www.thredup.com/resale/>

<https://www.brittslist.com.au/article/online-places-rent-borrow-clothes-australia/>

<https://www.mckinsey.com/~media/mckinsey/industries/retail/our%20insights/fashion%20on%20climate/fashion-on-climate-full-report.pdf>

Future Waste Lab <https://concreteplayground.com/melbourne/design-style/future-from-waste-lab-concept>

# Useful links

*Sustainability*

## Upcycled fashion

<https://www.theguardian.com/fashion/gallery/2021/jun/01/australian-fashion-week-romance-was-born-remake-and-upcycle-in-pictures>

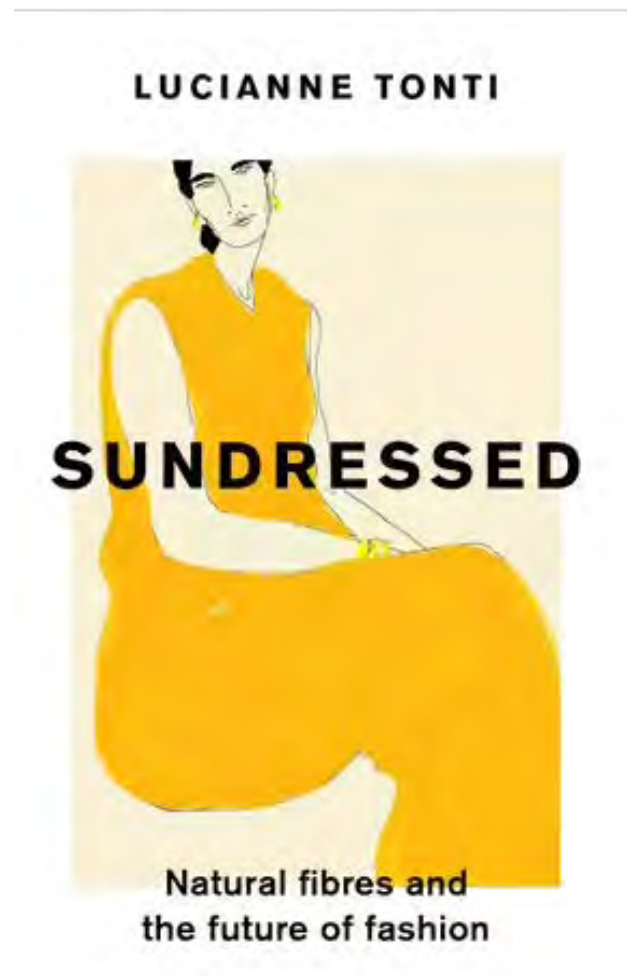
<https://concreteplayground.com/melbourne/design-style/future-from-waste-lab-concept>

# Further reading

Books



Ellen MacArthur Foundation, 2022. *Circular design for Fashion* (2022). Ellen MacArthur Foundation Publishing. Oxford.



Tonti, Lucianne, 2002. *Sundressed. Natural fibres and the future of fashion*, Black Inc. Collingwood.

# Online reading

*Sustainability*

<http://www2.globalfashionagenda.com/initiatives/fashion-on-climate/#/>

GlobalData Fashion Retailer Survey: 50 U.S. fashion (apparel, accessories, footwear) retailers were surveyed in March and April, 2021 about their Circular Fashion goals.

<https://www.talon.one/blog/whats-in-store-for-recommerce-and-sustainable-retail>

[https://www.google.com/url?  
q=https://www.voguebusiness.com/technology/dont-call-it-rental-  
inside-the-rebrand-for-  
fashion&sa=D&source=docs&ust=1650259212234741&usg=AOvVaw3hsiV  
WMHyrrud5ulNKzmWB](https://www.google.com/url?q=https://www.voguebusiness.com/technology/dont-call-it-rental-inside-the-rebrand-for-fashion&sa=D&source=docs&ust=1650259212234741&usg=AOvVaw3hsiVWMHyrrud5ulNKzmWB)

# Online reading

*Sustainability*

<https://www.voguebusiness.com/technology/dont-call-it-rental-inside-the-rebrand-for-fashion>

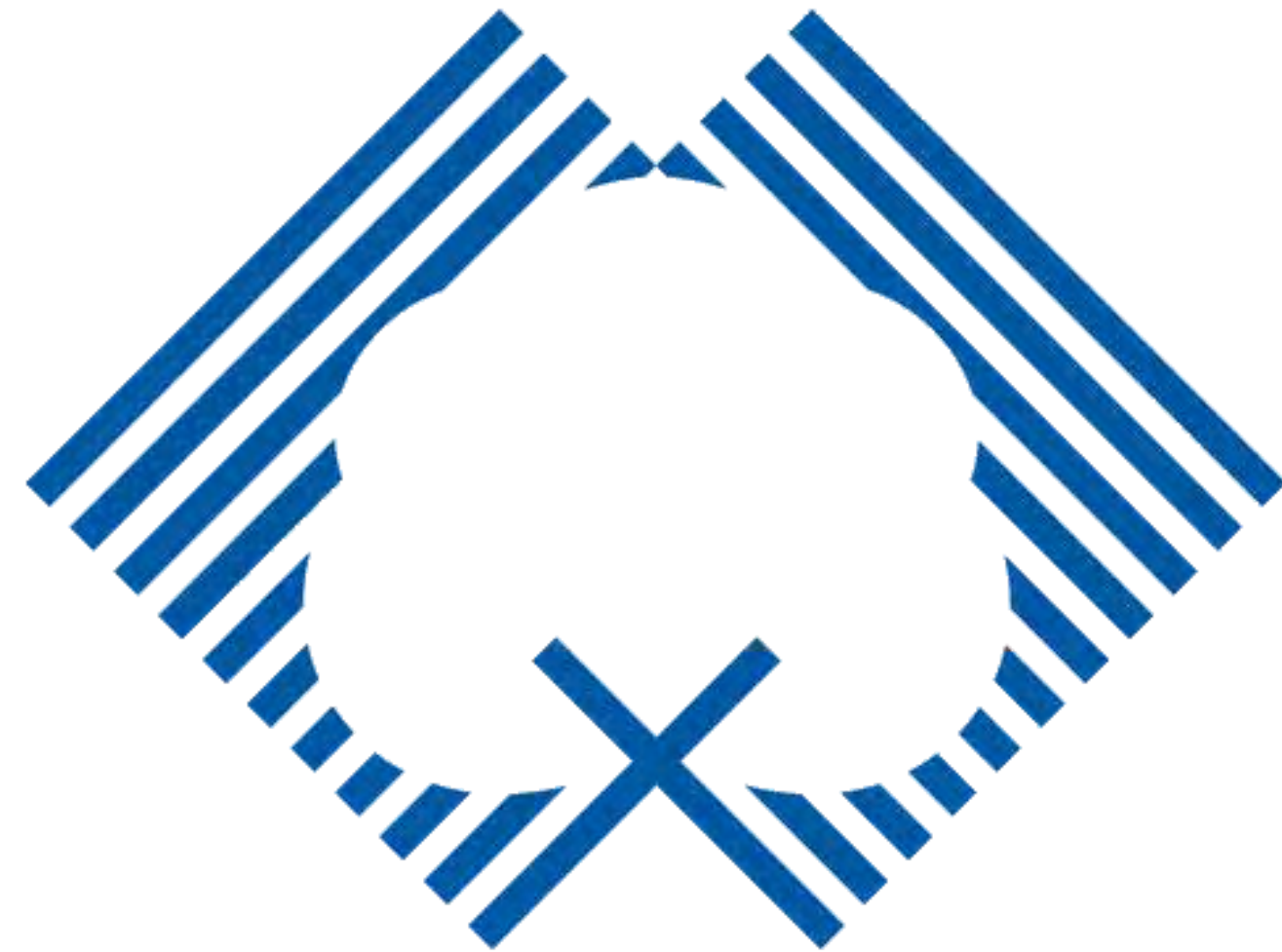
<https://www.mckinsey.com/~ /media/mckinsey/industries/retail/our%20insights/fashion%20on%20climate/fashion-on-climate-full-report.pdf>

<https://www.thredup.com/resale/>

# Resources prepared by *Emma Bond*

Emma Bond champions Australian cotton for its quality, values, and active commitment to people and planet. Her brand Madi & Pip fuses the optimistic energy of vintage silhouettes with opulent textures and prints. Garment design starts with accessibility and functionality to offer comfort and style to women of all abilities. Designed for the sustainability-conscious: Madi & Pip sources responsibly-grown cotton, and works on a made-to-order model to challenge fashion landfill. Emma is a fashion educator open to collaboration and sharing knowledge through workshops, incursions, resource development and private tuition.





COTTON  
AUSTRALIA

[www.cottonaustralia.com.au](http://www.cottonaustralia.com.au)