



A CIRCULAR ECONOMY FOR THE TEXTILE & APPAREL SECTOR

POSITION PAPER BY ACTA, 2020

WHILST THE SURGE OF RECENT MEDIA HAS FOCUSED ON THE CHALLENGES FROM TEXTILE WASTE –

The *real* opportunity has been largely overlooked. The textile sector has the chance to blueprint circular design, leading the way to a circular economy.

Collective action is needed to create change, and it is ACTA's charter to align the individual interests and efforts of textile users, producers, consumers and recyclers to achieve a circular economy. Our commitment to members is to create

a non-competitive space to accelerate learning whilst also providing a forum for input tackling fundamental issues of textile recovery that sit outside the control of any individual brand.

IN THE TRANSITION TO A CIRCULAR ECONOMY, TEXTILES ARE ALREADY AHEAD OF THE CURVE.

To direct a transition to the circular economy we have produced:

#1

TOWARDS A CIRCULAR ECONOMY FOR TEXTILES & APPAREL

This exploration of the current textile waste challenge re-frames the opportunity it presents.

Clothing and apparel is being disposed to landfill in greater quantities than ever before. Globally, textile production is estimated to contribute 8% of the global carbon budget – it is time we realise that these materials are too valuable to waste. This document acknowledges these challenges and re-frames the opportunity in this space.

#2

A COMMON THREAD: THE ACTA 2030 STRATEGY

ACTA's action plan to deliver knowledge, capacity building and innovation in textiles.

The ACTA 2030 Strategy provides a 10-year plan to transition the textiles sector to a circular economy. This plan covers the critical areas of research and data gathering, capacity building and scaling solutions for recovery.

#3

JOIN ACTA: THE MEMBERS CHARTER

A detailed description of ACTA membership benefits, events, resources and fee breakdown.

Collaboration and coordinated action is required to create change. ACTA provides its members the tools to ingrain the principles of the circular economy within their business, whilst contributing to the challenges that are bigger than any one brand.

TEXTILES ARE EVER-PRESENT. Not only are they our clothing, but they are also in our carpets, furniture, and bedding; they are in the cars we drive, at the events we attend, in the hotels we stay and in the uniforms we wear; currently ***LESS THAN 1% OF TEXTILES ARE RECYCLED IN AUSTRALIA.***

HERE ARE THE

8

THINGS ***YOU***
NEED TO KNOW

CLOTHING AND APPAREL WASTE IS NOT GOING AWAY –

NOT ONLY ARE WE PURCHASING MORE CLOTHES THAN EVER BEFORE, WE'RE WEARING THEM FEWER TIMES.

01

Clothing production has more than doubled in the past 15 years and the average number of wears per garment has decreased by thirty-six per cent (36%).¹ Astonishingly, eighty-five per cent (85%) of apparel purchased in Australia is sent directly to landfill at end of life.² ***This is clearly not a sustainable model.***

To keep pace with competitive trends fashion companies are cycling stock faster, and expired stock is increasing. H&M alone is estimated to have destroyed US\$4 billion of dead-stock in 2018.³ Today, the Australian apparel sector is worth AU\$22 billion annually, while the global apparel industry will surpass US\$1.65 trillion by 2020 – a massive sixty per cent (60%) growth since 2011.⁴

However, some commentators predict the second-hand clothing trade will be larger than fast fashion retail within the next decade.⁵ Enabled through social media and digital technology, consumers are finding it easier than ever before to embrace second-hand or rented clothing.

VOLUMES OF NON-APPAREL TEXTILE WASTE FROM INDUSTRY ARE POORLY DOCUMENTED AND REPRESENT A SIGNIFICANT SOURCE OF HIGH-VALUE RECYCLABLE MATERIALS.

02

In Victoria post-industrial sources account for sixty-eight per cent (68%) of all textile waste in the state.⁶

In New South Wales, the volume of carpet waste alone in landfill was equivalent to all clothing and apparel.⁷

When considering the ubiquity of textiles in cars, furniture, mattresses, signage, bedding, agriculture and the built environment there are large components of textile waste not captured in current reporting.

Industry consumes high volumes of relatively homogeneous non-apparel textiles (i.e. linens, towels, mattresses, furniture, carpets) which incur significant disposal costs to businesses. These factors make post-industrial textiles waste the most reliable source of material for emergent textile recycling technologies.

ESTABLISHED APPAREL AND SECOND-HAND CLOTHING MARKETS ARE LEADING THE TRANSITION TO A CIRCULAR ECONOMY.

03

Reuse is an unresolved challenge for many other industries, yet it is the most commonly used means of recovery for fashion and apparel. The charity sector oversees 40 million customer transactions each year, of which, approximately 45.6 million units of clothing and apparel are given a second life.⁸

Charities represent an existing, viable avenue to higher order recovery, extending the life-time of garments and supporting reuse.

In the fashion industry, rental models are gaining popularity by offering access to higher value items; whilst several brands now support their customers with instore resale and online communities for trading and selling unwanted garments. Internationally, the market value of the apparel rental sector is expected to quadruple over the next decade, as the 'pay as you go' model for fashion becomes increasingly accepted.⁹

In comparison to most other product or material categories, the established consumer behaviours, services and systems for reuse in a circular economy are already in place. In the transition to a circular economy textiles are already ahead of the curve.

DELIVERING TEXTILE RECOVERY SYSTEMS IS **A GENUINE OPTION FOR CARBON ABATEMENT.**

04

The annual greenhouse gas emissions from textile production is 1.2 billion tonnes or eight per cent (8%) of global emissions – greater than that of all international flights and maritime shipping combined.

Based on current rates of growth, the textile industry will account for twenty-six per cent (26%) of the global carbon budget by 2050.¹

The embodied impacts of textile production in land, energy, water and resources make achieving true fibre-to-fibre recycling (displacing virgin fibres) a significant opportunity to reduce carbon emissions—much more than just a means of reducing waste to landfill.



2,700 litres of water is used to produce a cotton t-shirt; one persons drinking water for 2.5 years.¹⁰



706 billion kilograms CO₂ is generated each year from polyester production for textiles.¹⁰



40% of textiles are made from natural fibres, 60% is now made from synthetic sources.¹¹



Fabric Dyeing **pollutes up to 200 litres of water** for every kilogram of fabric produced.¹²

INTERNATIONAL MARKETS FOR APPAREL REUSE HAVE AN UNCERTAIN FUTURE, MAKING HIGH RECYCLING SERVICES INCREASINGLY IMPORTANT.

05

The charity sector provides a well-established peer-to-peer reuse network, demonstrating the practicality of a community drop-off system, physical sorting, reuse/resale and potential for job creation.

However it is estimated that only fifteen per cent (15%) of clothing donated to charity in Australia is suitable for resale in this country, the remainder is transported offshore to be sold in international markets.¹³

Oxfam suggests that as much of seventy per cent (70%) of clothing donated to charities globally will end up in Africa.¹⁴ Consequently, an oversupply in developing countries has prompted discussions around banning the importation of clothing, due to its disruptive impact on domestic manufacturing.¹⁵

Establishing high-value recycling processes is essential to ease pressure on charitable networks allowing them to focus on delivering volume and quality second-hand clothing to markets in Australia.

TRANSPARENCY AND SUPPLY CHAIN IMPACT NOW **SITS AT THE FOREFRONT OF CONSUMER EXPECTATIONS.**

06

Sustainable best practice has become an essential brand differentiator. Studies show that more than six of ten customers closely consider a company's corporate values before purchasing,¹⁶ while eighty-eight per cent (88%) of customers become more loyal to brands with a proactive approach to corporate social responsibility.¹⁷

In Australia a 2019 study showed fifty-three per cent (53%) of shoppers would pay more for ethical and sustainable products.¹⁸

Given these trends, utilising recycled content in clothing and garment production must become a non-negotiable aspect for clothing sustainability; driving competitive markets, igniting growth and responding to consumer interest in more sustainable alternatives.

With close to 700 attendees at The Australian Circular Fashion Conference (in 2018 and 2019), it is evident that designers, manufacturers and consumers are eager to take action on textile recovery solutions across Australia.

AUSTRALIAN GOVERNMENTS **ARE TAKING NOTICE.**

07

Estimates vary, but between 500,000 and 800,000 tonnes of textiles are disposed of in Australia's landfills annually,¹⁹ whilst in the City of Sydney clothing and apparel equates to six per cent (6%) of curbside domestic waste; the city looks to 'provide all residents with a regular clothing and textile collections for recycling' is a goal of their 2030 waste strategy.²⁰

Textiles are becoming an area of intense interest across all levels of government.

Due to changes in international markets for recyclables, 2019 and 2020 have seen an unprecedented focus put on the nation's waste management practices. Increasingly, textiles are being recognised as a significant and problematic waste stream, with an increasing number of grant programs supporting the reduction, reuse or recycling of textile waste.

To give some sense of the economic and social opportunity in this space, textile sorting, reuse and recovery in the United States processes 1.1 billion kg of post-consumer textiles each year, and has created more than 17,000 jobs.²¹

THE TECHNOLOGICAL BARRIERS THAT HAVE PREVIOUSLY HINDERED TEXTILE RECYCLING ARE BEING OVERCOME.

08

Textile waste is poorly recovered, both internationally and in Australia, due to a lack of scaled recycling capacity.

As a result, reuse remains the dominant recovery process.

In Victoria textile waste has the lowest recycling rate of any measured waste stream, with less than one per cent (1%) being recycled into new products.⁶ Of this one per cent (1%), recycling processes are typically mechanical, transforming old garments into rags or stuffing.

However, change is coming. A myriad of technological solutions for fibre-to-fibre recycling are emerging locally and globally, which will fill the current technology gap in a circular economy for textiles.

In 2018 an international Research Institute for Textiles and Apparel opened two first-of-a-kind textile recycling facilities, using hydrothermal methods for recycling cotton and polyester into new fibres.

***WITH SUSTAINABLE APPAREL
AT THE FOREFRONT OF THE
CONSUMER CONSCIOUSNESS.***

***NOW IS THE TIME TO
ESTABLISH EXTENDED PRODUCER
RESPONSIBILITY & BEST PRACTICE.***



WE ARE THE AUSTRALASIAN CIRCULAR TEXTILE ASSOCIATION

ACTA is the not-for-profit industry association driving circularity for textiles within Australasia.

Our membership and stakeholders reflect this broader view of textiles, and make up the most complete network of knowledge and intention in Australia.

Whilst post-consumer clothing remains a key focus of ACTA, this is far bigger than fashion.

Our work is focused on driving inclusive, collaborative and strategic projects across the broader textiles industry and

the ACTA 2030 Strategy presents practical steps to a nation-wide recovery program.

Our work acknowledges the greater challenges of sustainable development in a changing climate and aligns to the United Nations Sustainable Development Goals 8, 9, 12 and 13.



A VISION FOR TEXTILES IN 2030

Built on the principles of the circular economy, this system will focus on preserving value in textiles, directing them to the highest order of recovery, reuse or recycling.

2030 TARGETS	ACTIONS
Reversing the growth in textile consumption	<ul style="list-style-type: none">□ Reduce apparel consumption in Australia by 20% (from 2015 baseline)□ Incorporate principles of circular product design to increase garment utilisation by 20% (from 2015 baseline)
Ninety-five per cent (95%) recovery and reprocessing of all textiles in Australia	<ul style="list-style-type: none">□ Support the development of recycling capacity for the spectrum of fabrics disposed nationally□ Develop an estimated 10,000 new jobs nationally, focusing on second-hand trade and material recovery□ Oversee the use of 70% of greater recycled content as standard across major government and private textile consumption
A National Textile Stewardship Scheme	<ul style="list-style-type: none">□ Oversee and direct \$4 billion of investment from government, industry and individuals into practical projects for textiles recovery.□ Establish a policy rewarding textile diversion from landfill and compliance with a textile stewardship program

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