



## MEDIA STATEMENT

**STRICTLY EMBARGOED UNTIL 25 July 2022**

### **Ground Breaking Trial Returning Cotton Textile Waste to Cotton Fields in Goondiwindi, Queensland Shows Promising Results**

A 12 month trial on a cotton farm just outside the rural town of Goondiwindi Queensland in Australia has shown it's possible to divert large amounts of cotton textile waste at end of life from landfill with no harm done to soil health or cotton yields.

Project collaborators are confident that with a solid business plan and more research, returning shredded cotton products to cotton fields could soon offer benefits to soil health, and a scalable solution to the massive global problem of textile waste.

“At the very least the trial showed that no harm was done to soil health, with microbial activity slightly increased and at least [2,070kg of Carbon Dioxide equivalents \(CO<sub>2</sub> e\)](#) mitigated through the breakdown of these garments in soil rather than landfill,” cotton industry supported soil scientist Dr Oliver Knox said.

“The trial diverted around two tonnes of textile waste from landfill with no negative impact on cotton planting, emergence, growth or harvest. Soil carbon levels remained stable and the soil's bugs responded well to the added cotton material,” Dr Knox said.

“There also appeared to be no adverse effect from dyes and finishes although more testing is needed on a wider range of chemicals to be absolutely sure of that,” Dr Knox said.

According to farmer Sam Coulton the cotton fields easily “swallowed up” the shredded cotton material, giving him confidence that this composting method has practical long term potential.

GOONDIWINDI  
Cotton



WORN UP



SHERIDAN  
EST. 1967

“We spread the cotton textile waste a few months before cotton planting in June 2021 and by January and the middle of the season the cotton waste had all but disappeared, even at the rate of 50 tonnes to the hectare,” Sam said.

“I wouldn’t expect to see improvements in soil health or yield for at least five years as the benefits need time to accumulate, but I was very encouraged that there was no detrimental impact on our soils.

“In the past we’ve spread cotton gin trash on other parts of the farm and have seen dramatic improvements in the moisture holding capacity on these fields so would expect the same using shredded cotton waste,” he said.

The project, under the guidance of circular economy specialists Coreo, was a partnership between the Queensland Government, Goondiwindi Cotton, Sheridan, Cotton Australia, Worn Up and Cotton Research and Development Corporation supported soil scientist Dr Oliver Knox of UNE.

Around two tonnes of end-of-life cotton textiles from Sheridan and State Emergency Service coveralls were processed at Worn Up in Sydney, transported to “Alcheringa” farm, and spread onto a cotton field by local farmer, Sam Coulton.

According to Cotton Australia’s Brooke Summers there is keen interest in further collaboration from industry groups, government, farmers, brands and potential investors.

“There’s certainly a huge amount of interest in this idea and the trial results and while we don’t want to get ahead of ourselves, we are hopeful that over time this will evolve to deliver a scalable solution for cotton textile waste here in Australia,” Brooke said.

“We’re excited to announce the trial will be replicated in the 2022-23 cotton season, with cotton farmer Scott Morgan’s Gunnedah property in NSW added as a second site. This will give us further confidence the results we’ve already seen can be replicated across time and geographies,” she said.

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 textiles 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 grower 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.

### **Quotes From Partner Organisations:**

“We’re encouraged by the initial findings and results of the project and look forward to expanding the trial over the next 12 months. In this day and age, we should be part of the solution for taking cotton right back through the system. We grow it here and we should be able to bury it here with positive environmental and economic impact on the local community.”

*Local farmer and Goondiwindi Cotton owner, Sam Coulton*

“I think we’ve proved this is a possible instant solution to a major waste issue. Scaling the concept and optimising the field application will hopefully be something we can undertake in the year ahead.”

*Dr Oliver Knox, UNE (supported by the Cotton Research and Development Corporation)*

“These results show us that it’s possible to find a scalable solution to cotton textile waste right here in Australia by returning these products to our farmlands. We know there’s more research to be done and there are a lot of challenges still to overcome but the fact that it’s possible is what’s so exciting.”

*Brooke Summers, Cotton Australia*

“We’re really encouraged by the results of the trial, essentially this has given us a green light to continue exploring circular economy opportunities for end-of-life cotton textiles. This project is such a meaningful demonstration of circular economy collaboration. Benefitting rural communities whilst solving global challenges.”

*Ashleigh Morris, CEO of Coreo*

“We couldn’t be more elated about the success of the trial in Goondiwindi. To think that we might have a scalable solution for textile waste on our shores is even more exciting. Hanes looks forward to finding ways to support the next phase of the trials and we hope that this paves the way for more innovative solutions to textile waste in our country.”

*Tanya Deans, President Hanes Australasia*

### **Further Information**

- [Goondiwindi Circular Cotton Project 2021-22 Trial Results](#)
- [Goondiwindi Circular Cotton Project impact dashboard](#)

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