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Traceability from farm to fashion, on a whole new-level

Words by Samantha Noon

Australian transparency technology startup, FibreTrace, founded by NSW cotton farmers, Danielle and David Statham, have launched their first-ever carbon positive fashion collection with Nobody Denim.

Ever wondered where the threads on your back came from? One of the highest-yielding and lowest-water-using cotton farmers in the world, Danielle and David

“It’s been three years in the making,” Danielle said of their now global-reaching blockchain-based tracking platform, FibreTrace which uses patented technology with embedded luminescent pigments so shoppers can check the origins of a garment, even the farm’s production methods, at the “swipe of a finger” using in-store Bluetooth scanners or their mobile phone.

“Transparency is best practice, it’s not just a nice to have,” said Danielle, who has worked in the fashion industry for over 25 years and secured well-known labels to pilot the technology from the USA, to Asia and Europe, including Australian owned and made fashion brand Nobody Denim.

The pilot has been a success, with the launch of the first-ever certified carbon positive collection in Nobody Denim stores and online, on 19 October 2020. But it didn’t happen overnight.

Like with much innovation that we are seeing emerge now, it has taken years of independent field trials, research and development, sustainable ecological farming practices, and technology investments for Danielle and David to create Good Earth Cotton, an independently certified carbon positive and ethical cotton product.

The Melbourne-based brand Nobody Denim, designed, laundered and manufactured the five-piece denim collection, using Good Earth Cotton grown at Moree, by Sundown Pastoral Company, from the Statham's cotton plantation, "Keytah".

Simply put, their farms act as a giant carbon sink and absorb more carbon than they release. "As a group, we are always looking at how we can better what we are doing year on year through benchmarking and meticulous data sets," said Danielle.

"However, the lack of standardised measurements and methods for assessing and documenting soil health are significant barriers to adopting and demonstrating soil health practices and systems."

Australian transparency tech startup, FibreTrace, founded by NSW cotton farmers, Danielle and David Statham.

Building soil biodiversity through cover crops, zero tillage and water and land efficiencies has been a key focus for their operation, along with bankless channel systems to continue efficacy of water use.

“We are now working towards being one of the first fully automated large scale cotton operations in Australia to use the bankless channel irrigation system, enabling a 30-35% reduction in tailwater reticulation and reducing energy use.”

She explained, “The water is on and off the field more efficiently to maximise yield with significant labour saving, which creates an 18% machinery efficiency by eliminating field turns.”

Some of their regenerative farming practices include ongoing protection of native vegetation and wildlife diversity across large tracts of land, crop rotations to help maintain ground cover and organic amendments used in the form of the natural breakdown of cotton trash on fields.

There is also extensive use of renewable energy, said Danielle with a future goal to have all their farming operations using hydrogen technology to eventually create

First-class farming innovation

“There are several global aggregations, including Australia, preparing to go to market with the FibreTrace technology for next season’s crop,” said Danielle. This includes the verification of their soil data, carbon emissions and energy use to adhere to the FibreTrace carbon positive criteria.

“The farmers we are partnering with are leaders in the cropping fields and true visionaries for the Australian agricultural industry.”

The good news is – they’re looking for more farmers to come on board.

“Good Earth Cotton powered by FibreTrace allows the supply chain to show the verified data, tell the stories and reveal the journey and absolute truth of a garment in real time.”

Supply chain partners input data and certification at each checkpoint, (field, cotton gin, spinner, fabric mill, maker or retail outlet), weaving together a rich picture of the fibres’ passage, and revealing its carbon emissions, energy, and water usage, all accessible on the FibreTrace proprietary platform dashboard.

“Without science-based data and the physical tracer connecting the two, it is hard to be transparent and claim truthful stories – and in a few seconds, we can actually give that to a consumer. That’s incredibly powerful,” said Danielle.

from **Good Earth Cotton**

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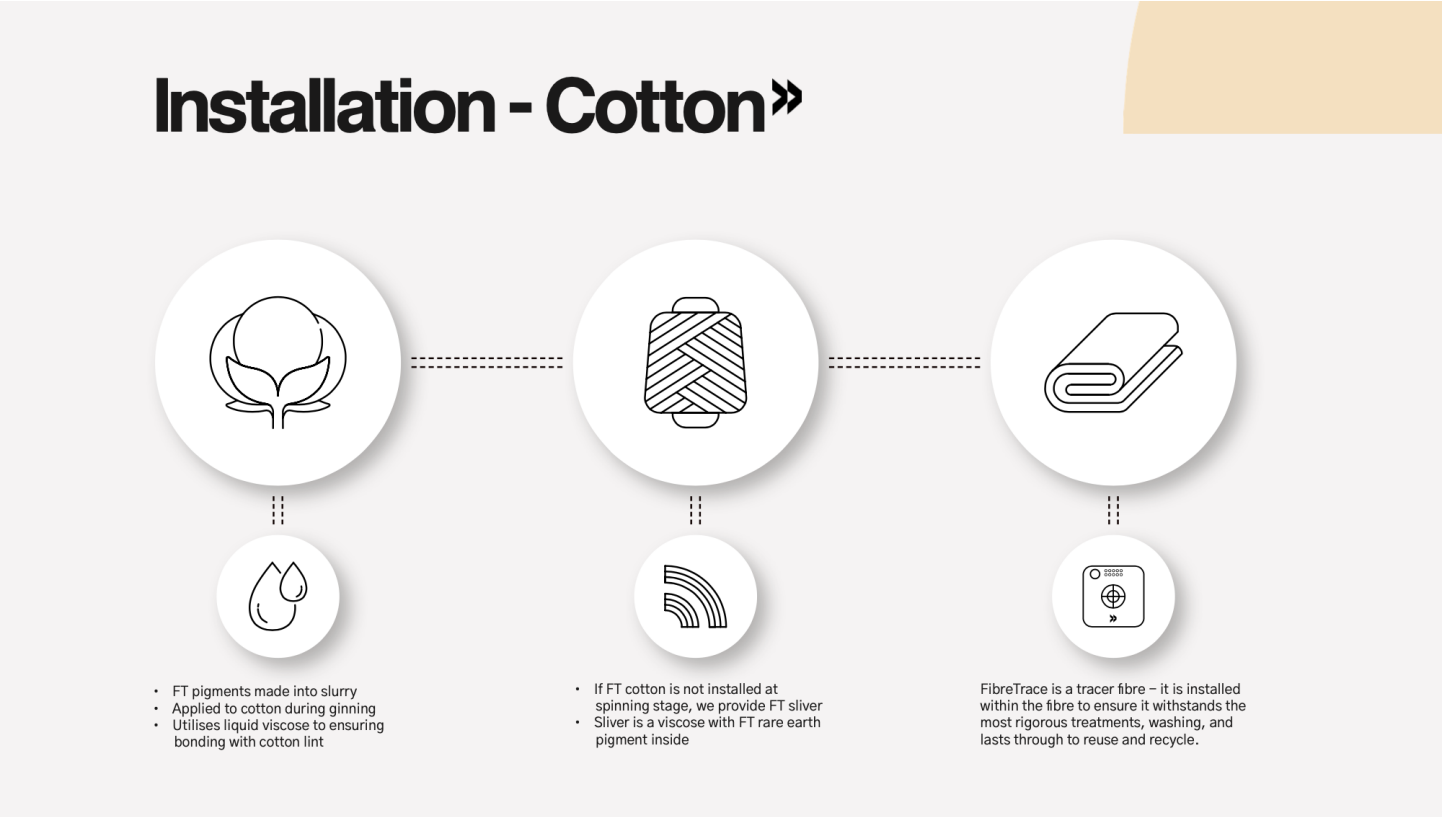
Danielle is on a mission to help close the loop between the fashion world, its raw fibres and the future generations of consumers.

“Cotton is the most loved fibre in the world, but it often gets a bad wrap, albeit often unjustified!”

“This technology will actually reveal a lot of truth about the fibers people are using and how business models go forward.”

So how does FibreTrace technology work?



Every time the fibre, fabric or garment passes through the supply chain it is scanned, capturing valuable environmental, ethical and GPS location data.

This digital story begins on farm when the cotton is picked, at “Keytah”, then scannable, yet minute luminescent pigments are embedded in the cotton ginning process, at Moree’s Wathagar Ginning Company. A small handheld FibreTrace scanning device then validates the cotton fibre, as it’s baled up, and uploads information to their platform.

The FibreTrace cotton is then scanned again before it’s spun into yarn and woven in Istanbul by Orta Anadolu, and then shipped back to Nobody Denim in Thornbury,

Environmentally conscious consumers

FibreTrace technology flips fast fashion on its head, with a “no waste, no finish line” lifecycle, where the raw materials can be reused, recycled and essentially reborn.

Every resource in their supply chain is considered and measured to ensure the greatest efficiency, Danielle explained.

“FibreTrace technology is geared to empower responsible brands to reduce their impact on the planet, through radical transparency, by giving the supply chain and their consumers 20/20 vision of their garments.”

Today’s consumers are deeply educated and expect real-time traceability and transparency with factual data. In fact, supply chain transparency was regarded as the second-highest priority to be solved by 2030, behind climate change, in the 2019 Fashion Transparency Index Review.

The future of cotton farming: what is sustainable?

“For the global cotton sector, it is not a case of organic cotton vs conventional cotton. But instead, we must adopt a holistic approach that discusses best practice – one that takes into account the scale and agri-climate of the farm.”

We can’t make the assumption about what is more sustainable, she added.

“We have to first ask what is best for that grower and the answer can only come from the growers themselves. What works for farmers in the USA may not work in West Africa, and what works here [in Australia] may not be viable for farmers in India.”

“I would like to see a change for the industry globally where the producer of truthfully preferred fibres, not just cotton is inclusive of full transparency with supporting data.”

Danielle said, there needs to be a more progressive market model.

“Those who are truly committed to the cause in reducing the impact of cotton on their land should be rewarded for their efforts and the commodity price of sustainable cotton recognised.”

“Each player in the supply chain is accountable for their socio-environmental impacts, and in turn responsible for making meaningful interventions and driving true innovations through the supply chain towards a more sustainable future.”

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