



ANNUAL REPORT

2017 | TWENTY SEVENTEEN

A word from the Founding Organizations



ADAM KAY

CEO, Cotton Australia

The past year has been a challenging one for the Australian industry, with a cold start that led to one of the hottest and driest summers in recorded history. I'm pleased to report that although it was a tough cotton season, the resilience of our growers shone through and we harvested a four million bale crop during 2017, worth \$2.5 billion to the nation.

The Cotton LEADS™ Program has remained a core partnership for our organisation, and our close relationship with Cotton Incorporated and others in the program has deepened over the course of its history. One significant outcome has been the strong collaboration that's developed between the cotton research bodies in Australia and the U.S. with a number of exciting joint initiatives planned.

A very promising development has been the increased number of major international brands that have chosen to join the Cotton LEADS™ Program this year. These brands are including cotton from Australia and the U.S. in sustainable cotton strategies and recognising our country-wide achievements in sustainable, ethical cotton production. It gives our farmers a great sense of pride that such high-profile brands are seeking their product, due to the leading practices they're using to remain efficient producers of high-quality natural fibre.

With the Cotton LEADS™ Program heading into its fifth year, it is important to reflect on the program's achievements, challenges and plans for the future. There is no doubt that the cotton farmers in Australia and the U.S. are well placed for a future that demands responsible raw materials, and the Cotton LEADS™ Program continues to provide an important platform for our growers to tell their story to supply chain customers.

On behalf of all cotton growers in Australia, thank you for supporting our industry through your involvement and support of the Cotton LEADS™ Program.



GARY ADAMS

President/CEO, National Cotton Council of America

After being founded four years ago by the U.S. and Australian cotton industries, Cotton LEADS™ continues to educate the cotton supply chain on 1) the responsible growing practices and environmental gains within the two countries and 2) how the self-investment by growers contributes to those gains. However, as a way to ensure we are building upon the gains U.S. cotton already has achieved, I'm pleased to report that the National Cotton Council adopted a resolution earlier in 2017 calling for the creation of the COTTON USA Sustainability Task Force.

Chaired by Louisiana cotton producer Ted Schneider, the task force subsequently collaborated with U.S. cotton industry associations on developing goals for measurable continual improvements in environmental stewardship, farm productivity and resource efficiency such as land, water, air, input and energy use. As a result, the U.S. cotton production goals being pursued by 2025 are **reducing**: 1) the amount of land needed to produce a pound of cotton fiber by 13%; 2) soil loss by 50%, in balance with new soil formation; 3) energy to produce seed cotton and ginned lint by 15%; and 4) greenhouse gas emissions by 39%. The goals are **increasing**: 1) water use efficiency (more fiber per gallon) by 18%; and 2) soil carbon in fields by 30%.

Already one of the few cotton-growing countries that has stringent national-level oversight of farm practices, we now believe the United States may be the world's only country with these kinds of measurable, quantified goals. U.S. cotton's global customers already appreciate they are being provided with quality fiber in a timely manner. Now, the hope is that they will have increased awareness of and appreciation for how that fiber is produced in an environmentally responsible way. With this expanded sustainability reach, we believe the U.S. cotton industry can become the supplier of choice for those committed to only buying fiber produced with sustainable and responsible environmental, safety and labor practices.

Perhaps even more leading companies will join the 500-plus Cotton LEADS™ partners, as Hugo Boss, Gap Inc. and Walmart did this past year.

The Year in Review

62 NEW PARTNERS 

JOINED THE COTTON LEADS™ PROGRAM, INCLUDING A NUMBER OF MAJOR INTERNATIONAL BRANDS

Cotton LEADS™ Partner events held in Mexico, Peru and the U.S.

Best practice information and cotton research shared globally

PARTNERS WEIGH IN ON THE PROGRAM

COTTON FARM TOURS IN THE U.S. AND AUSTRALIA

COMBINED ANNUAL COTTON R&D BUDGET OF MORE THAN \$100 MILLION INVESTED

Partner Post newsletter translated into six languages

A NUMBER OF JOINT RESEARCH AND DEVELOPMENT INITIATIVES UNDERWAY



RELEASE OF THE MOST COMPREHENSIVE COTTON LIFE CYCLE ASSESSMENT EVER PUBLISHED

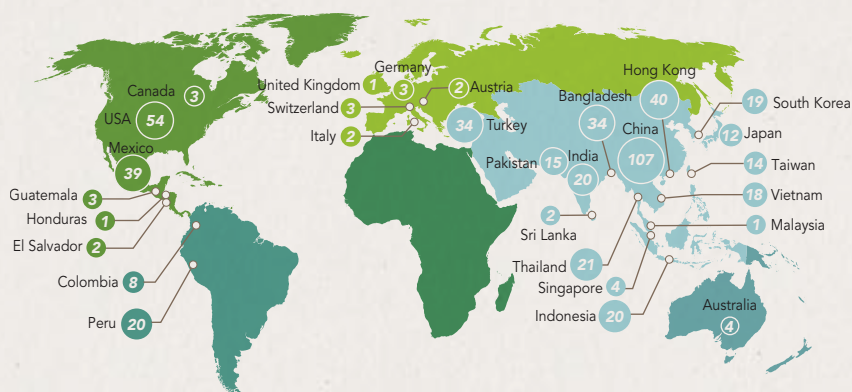
Trade shows and meetings to increase program awareness

The Cotton LEADS™ Program is committed to responsibly produced cotton through national and international efforts that are focused on sustainability, people and supply chain traceability.

The program and the founding organisations in Australia and the U.S. have a strong track record of continuous positive change, underpinned by robust government regulation and national research and development programs. Both countries are committed to cotton production that leaves a minimal footprint on the natural environment, and produces cotton with positive social outcomes for the communities in which it is grown.

THE COTTON LEADS™ PROGRAM IS DRIVEN BY COTTON PRODUCERS, SCIENTISTS AND PROFESSIONALS STRIVING TO ENSURE COTTON IS PRODUCED RESPONSIBLY NOW AND FOR YEARS TO COME.

COTTON LEADS™ PARTNERS BY COUNTRY



5 CORE PRINCIPLES OF THE COTTON LEADS™ PROGRAM

- 1 COMMITMENT** to the social, environmental, economic and regulatory factors required to produce world-class cotton
- 2 RECOGNITION** that sustainable and responsible cotton production requires continual improvement, investment, R&D and the sharing of best practices information among growers and industry
- 3 UNDERSTANDING** that leading change in responsible and sustainable cotton practices will have the most positive impact when implemented in collaboration among farm, regional, national and international programs
- 4 BELIEF** in the benefit of working cooperatively with similar programs that seek to advance responsible and sustainable cotton production in an effort to keep global cotton competitive in world fiber markets
- 5 CONFIDENCE** in a cotton identification system that ensures traceability from farm to manufacturer

Working Together Towards Responsible Cotton Production

Research Exchanges in the United States and Australia

Leading cotton researchers from the U.S. and Australia met several times during the year to progress a number of joint initiatives to further responsible cotton production in both countries.

In March, a team of U.S. cotton researchers visited Australia to exchange information that will further research efforts in cotton genetics and breeding. The team visited a number of Australia's most innovative growers to look at common challenges around water management, high temperatures and crop fertility.

Following this visit, senior representatives of Australia's Cotton Research and Development Corporation (CRDC) visited their peers at Cotton Incorporated Headquarters in Charlotte, North Carolina during June.

On the agenda was a number of collaborative research projects that are progressing to find joint solutions that can assist both countries and the global cotton industry.

This included a visit to North Carolina State University, which is being funded jointly by CRDC and Cotton Incorporated to investigate the shedding of microparticles from different types of fabric.

The group also met to develop a range of potential topics for collaboration in the future and identify a set of priorities to take further.

"It's always a wonderful opportunity to catch up with our U.S. counterparts. We share many common challenges and it's becoming more and more important to collaborate. The meeting helped us prioritize those challenges we can best work on together," CRDC R&D Manager Allan Williams said.

Research exchanges in the United States and Australia



ICAC SEEP Committee

The Australian and U.S. cotton industries both have representatives on the International Cotton Advisory Committee's Expert Panel and the Social, Environmental and Economic Performance of cotton (SEEP). Dr. Kater Hake (Cotton Incorporated) and Dr. Bill Norman (National Cotton Council) sit as members, and it is chaired by Cotton Research and Development Corporation's Allan Williams.

SEEP recently prioritised its activities for the next two years, one of which will be compiling information on soil health from around the world. Soil health is fundamental to cotton production, and also influences the two most significant impacts of cotton production, as assessed using Life Cycle Assessment methodology: greenhouse gas emissions and water use.

This work, proposed and to be supported by Cotton Incorporated, will gather and share site-specific best practices for soil health. In this project, SEEP will expand the existing knowledge base on soil health and organize it into cotton grower relevant practices and information. Once assembled, it will be a freely available resource for the cotton industry to improve its environmental footprint and resource use efficiency regarding the critical inputs of fertilizer and water. It is vital to our industry's success that global expertise sharing through ICAC SEEP continues to address concerns such as productivity and environmental impacts.

Leading Australian Cotton Breeder Contributes to U.S. Breeder Tour

Three staff from Australia's CSIRO Cotton Breeding Program (Warwick Stiller, Warren Conaty and Susan Jaconis) attended the 2017 Cotton Breeders Tour held in September in Arizona, U.S.

Warwick Stiller was asked to give presentations on work being conducted in Australia that was relevant to colleagues in the U.S. The first was around the significant impact that breeding has made on the sustainability and profitability of Australian cotton production and some keys to success that could be applied to other production areas, such as the U.S. The second provided learnings on the way the Australian cotton industry has addressed its *Fusarium* issue through breeding and other coordinated industry responses.

"Overall, I believe it is crucial that Australia and the U.S. continue to share ideas and have open dialogue around these issues, which are common to both our industries. Ultimately, we are all aiming to improve the sustainability of cotton production through responsible use of resources and best practice, which will not only directly benefit the producer, but will have flow-on effects all the way to the consumer."

Dr. Stiller



Warwick Stiller shares successful research to fight the FOV (*Fusarium*) disease.

Working Together Towards Responsible Cotton Production (ctd).



Cotton 2040 Project

The Cotton LEADS™ Program was represented at the Cotton 2040 Project during the year, an initiative of global NGO Forum for the Future to build demand for sustainable cotton around the world.

The 'Building Demand' workstream is a collaboration between cotton identity programs and major brands including a number of Cotton LEADS™ partners. It aims to increase demand for sustainable cotton within organisations, by building the business case for sustainable cotton and providing tools for accessing it in the marketplace.

Cotton LEADS™ Program Review Planned

With the Cotton LEADS™ Program heading into its fifth year, the founding organisations are taking the opportunity to reflect on the program's successes, review its strengths and challenges, and make plans for the program's next phase. A key part of this review will be the Cotton LEADS™ Partner Survey, conducted during 2017 to collect feedback from partners on issues such as current sourcing strategies, sustainability initiatives, communication requirements and program satisfaction.

World's Most Comprehensive Life Cycle Assessment Report Published

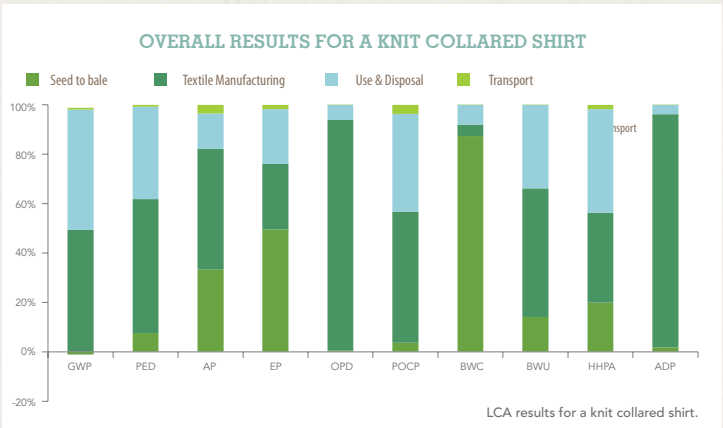
During 2017, the Cotton Foundation completed a major project to assess the life cycle of cotton, with Australia's Cotton Research and Development Corporation contributing data for the first time, as part of its commitment to the Cotton LEADS™ Program. The research project was also strengthened by the involvement of many of the Cotton LEADS™ Partners.

The primary objective of this Life Cycle Assessment (LCA) was to provide robust and recent life cycle inventory (LCI) data for global cotton fiber production, textile manufacturing and consumer use. This allows us to ensure accurate representation of the impacts from cotton in other LCAs.

Building on the initial life cycle inventory (LCI) and analysis (LCA) released in 2010, the updated research provides a more comprehensive snapshot of cotton – and its relationship to the environment – across all phases of product life. A larger pool of global consumers was included in the update to more accurately reflect the impact of consumer use and disposal of cotton textiles.

When the entire cotton life cycle is considered, the textile manufacturing and consumer use phases dominated most of the impact categories, as illustrated by the data for a knit, collared casual shirt (one of three products assessed). For the life cycle phases outlined (agricultural production, textile manufacturing and consumer use), textile manufacturing was the largest contributor to 12 of the 14 impact categories. The major sources of potential impact for manufacturing were wastewater emissions from wet processing facilities, energy use in yarn manufacturing and weaving, and upstream production of energy and process chemicals. The agricultural phase had significant impacts on eutrophication potential and blue water consumption. Nitrogen fertilizer production and use and irrigation water contributed the largest share to impacts in the agricultural production phase. While the consumer use phase was not a primary driver for any one metric, the impact of laundering and disposal was similar in magnitude to the textile manufacturing phase on several metrics, such as energy use and greenhouse gas emissions.

Cotton Life Cycle Assessment Results



ENVIRONMENTAL IMPACT CATEGORIES		
	TECHNICAL TERM	EXAMPLE
AP	Acidification Potential	Acid rain
EP	Eutrophication Potential	Water pollution
GWP	Global Warming Potential	Greenhouse gas emitted
ODP	Ozone Depletion Potential	Ozone hole over polar ice caps
POCP	Photochemical Ozone Creation Potential	Acid rain
PED	Primary Energy Demand	Electricity and fuel needed
WU	Water Used (Gross Volume)	Water used in washing machine
WC	Water consumed (Net Volume)	Water evaporated in dryer
ETP	Ecotoxicity Potential	Animal health
HTP	Human Toxicity Potential	Human health



Spotlight on Cotton LEADS™ Partners



The number of Cotton LEADS™ partners rose from 436 to 503 during 2017, with representation across brands, retailers and manufacturers now extending to 29 countries around the world.

Importantly, a number of major international brands joined the program this year, sending a strong message to farmers and the supply chain that cotton from Australia and the U.S. is being recognized as having been grown with the highest care for the natural environment and the industry's people.

The Cotton LEADS™ partners are united behind a common vision to source responsibly produced cotton in their supply chains, delivered by the Cotton LEADS™ program founding countries Australia and the U.S.

Major Brands Partner with the Cotton LEADS™ Program

In perhaps the biggest show of support for the Cotton LEADS™ Program to date, a number of major U.S. and European brands joined the program during 2017 to demonstrate their support for responsible cotton production in Australia and the United States.

Hugo Boss, GAP Inc., Wrangler, L.L.Bean and Walmart all signed the Commitment to Cotton and are now including Cotton LEADS™ cotton as part of their sustainable cotton sourcing strategies.

"This is great news for the program and shows the momentum that continues to build with awareness of the continuous improvement efforts in Australia and the U.S. These efforts begin on the farm with the commitment of cotton producers and continue with the research and support of our cotton industry organizations. Retailers and brands recognize and encourage that commitment," said Mark Messura, Senior Vice President Supply Chain Marketing, Cotton Incorporated.

503

**PARTNERS NOW
IN THE PROGRAM**

NEW BRAND PARTNERS:

HUGO BOSS, WALMART, L.L.BEAN,
GAP INC., WRANGLER



62+

new partners joined

**THREE PARTNER
ENGAGEMENT EVENTS:**

• LIMA • MEXICO CITY • CHARLOTTE

5

*Five new projects with
partners on improving
soil health, water use
efficiency, measurement
tools and traceability*

**PARTNER POST TRANSLATED
INTO SIX LANGUAGES**



Partner promotion at tradeshow:
Intertextile, Outdoor Retailer and
Premiere Vision

**TWO BRAND FARM TOURS IN
THE U.S. AND AUSTRALIA**

Q&A with Heinz Zeller, Head of Sustainability & Logistics, HUGO BOSS



Hugo Boss's Heinz Zeller (left) meets with
Cotton Australia CEO Adam Kay

Q: What does it mean to Hugo Boss to be a partner in the Cotton LEADS™ program?

A: The five core principles of the Cotton LEADS™ program – focused on producing sustainable cotton – match well with our own cotton commitment. The transparent disclosure of the continuous improvement programs and results achieved for issues like water, soil, pest management or biodiversity, while also applying the LCA methodology, are key requirements we are looking for when it comes to sustainable cotton farming. The availability of long and extra-long staple cotton and high purity of cotton fibers are critically important for HUGO BOSS products.

Q: Why are nationally based cotton identity programs like the Cotton LEADS™ program an important option for brands?

A: To have a transparent supply chain worldwide, it is essential to have recognized national sustainability programs in place in order to respond to the enormous complexity of the cotton system. Furthermore, the Cotton LEADS™ traceability with its unique bale identification number enables an efficient way of getting the transparency we require in the cotton supply chain.

Q: How is Hugo Boss incorporating the Cotton LEADS™ program into its overall sustainability strategy?

A: The Cotton LEADS™ program is one of our strategic alliances as part of our sustainable cotton commitment. About 50% of the raw materials are cotton fabrics and therefore cotton is the most important raw material. Hence the Cotton LEADS™ program has become an important partner for the HUGO BOSS sustainable sourcing strategy.

Partner Engagement

Partner Engagement Events: Mexico, Peru and United States

In 2017, the Cotton LEADS™ program hosted three partner meetings in Lima, Peru, Mexico City, Mexico, and Charlotte, NC. The goal of the events was to keep partners informed of program activities, and to highlight the research and sharing of best practices that is taking place within the grower community.

Partners heard presentations on continuous improvement efforts, the lifecycle assessment results and the recent goal setting by the U.S. industry. A key topic was also how to incorporate program partnership into marketing efforts within the supply chain and to consumers. Following the presentations, partners were able to ask questions and participate in a dialogue with agricultural experts as well as network with fellow partners.

"Partner companies joined the Cotton LEADS™ program not only to recognize the responsible production efforts of U.S. and Australian cotton farmers, but to stay informed, aware, and ahead of the curve on the latest efforts in sustainable cotton production. Through meetings with our global partners, the Cotton LEADS™ program informs and engages partners," said Mark Messura, Senior Vice President of Supply Chain Marketing at Cotton Incorporated.

"Partners can both learn and challenge us to keep leading the way in responsible production, research and measurement. And most importantly, partners are joining together with cotton organizations to find improvements in production and measurement. This collaboration really underscores the importance of a total effort by stakeholders to tackle the challenge of sustainability," Mr. Messura said.

Partner events around the world keep partners informed.



Promoting Cotton LEADS™ Partners Globally

Industry tradeshows offer a unique opportunity to interact with manufacturers, brands and retailers throughout the supply chain. In today's environment, nearly every discussion includes questions about sustainability, as companies want to know more about where their raw material comes from.

Cotton LEADS™ founding organizations share the facts on cotton at tradeshows such as Shanghai Intertextile, Outdoor Retailer and Premiere Vision. In addition, program partners that are doing good things in the industry are highlighted and promoted with these efforts.

"Shanghai Intertextile continues to be a leading tradeshow for the industry. The message of sustainability is becoming even more important and visible. Companies value what the program offers and many are eager to promote their partnership and responsible activities to their supply chain as well as their end consumer. It is great to recognize our partners' efforts at this show," said William Kimbrell, Senior Director, Cotton Incorporated Supply Chain Marketing Asia.

"Outdoor Retailer focuses on active and outdoor products. The companies attending are dedicated to environmental stewardship and the concept of getting more while using less. We have a positive story to tell about cotton as a raw material and how these efforts are supported by partners of the Cotton LEADS™ program," said David Earley, Senior Director, Cotton Incorporated Supply Chain Marketing U.S.



Attendees at the Outdoor Retailer tradeshow discuss how cotton is doing good for the environment.



Cotton LEADS™ founding organizations recognize joining partners at Shanghai Intertextile.

Cotton LEADS™ Partners Leading the Way



Walmart is dedicated to learning more about cotton production and putting its learnings into action.

"Walmart is excited to be a part of the effort to advance sustainability, and especially to reduce greenhouse gas emissions, in the cotton textile supply chain. With the collaboration of our suppliers and the Cotton LEADS™ program, we can build momentum and a more focused approach to achieve our goals of delivering sustainable products to our customers."

KEN LANSHE, VP GM TECHNICAL, QUALITY & SUSTAINABILITY

WALMART

Going Big on Sustainability

Walmart is more than the global leader in retail – they are also a global leader in large-scale sustainability initiatives. To achieve its three overarching goals – to be 100% powered by renewable energy, create zero net waste and sell products that sustain the environment – will take bold thinking, collaboration and firm dedication.

Walmart believes that customers shouldn't have to choose between a product they can afford and one that is good for the environment. By learning more about the cotton growing industry, Walmart aims to put these ideals into action in a more impactful way, driving trust and transparency into the apparel and textile value chain. Walmart believes they have an opportunity, and responsibility, to conduct business with a 'shared value' approach – operating in a way that helps strengthen communities, is good for society and is also good for the environment. Walmart joined the Cotton LEADS™ program to develop a deeper understanding of the textile and apparel industry and work together to identify and address key issues facing cotton.

WRANGLER

Tough Denim. Gentle Footprint.

Do a good job and help out. These two values are central to the American spirit and epitomize Wrangler's commitment to sustainability. Seventy years after the iconic denim brand made its first pair of blue jeans, Wrangler launched a healthy soils initiative to assist and encourage U.S. cotton growers to adopt best practices for soil health.

Wrangler's sustainability by the numbers:

3 billion liters of water saved since 2007

Zero waste at all five distribution centers

70k employee volunteer hours since 2005

8,600 MT of sustainable cotton purchased in 2016

The initiative's science-backed soil health platform promotes no-till farming, crop rotation and cover crops, which build crop resilience to weather disruptions while improving yield, reducing water and energy inputs, preventing erosion and reducing greenhouse gas emissions.

The pilot program launched this year with help from the Newby Family, seventh-generation farmers in Athens, Alabama. The brand plans to expand the program for the 2018 growing season to another 12 U.S. cotton farms.

With additional time-bound goals for water, waste, chemicals and energy, Wrangler is truly taking care of the land, the industry, its community and the future.



Wrangler is proud to work with cotton farmers like the Newby Family (pictured) to increase yields while decreasing environmental impacts.

JOEONE Promoting Responsible Cotton in China



JoeOne demonstrates their consumer facing promotion of the Cotton LEADS™ program and responsibly produced cotton.

JoeOne, the leading bottoms wear brand in China, recognizes there is more to their business than the products they develop and sell. Sustainability is a key element. Whether it is providing a high-quality work environment for employees, sourcing product from sustainable raw materials or raising awareness at the consumer level, JoeOne is committed to do what it takes.

To date, JoeOne has featured Cotton LEADS™ hangtags on more than 1.5 million JoeOne cotton products. And, they are not done yet. For JoeOne, their efforts to promote responsible cotton to the consumer have raised awareness and helped to stimulate demand for their cotton product lines. The Cotton LEADS™ program has provided JoeOne with an opportunity to communicate responsibly produced cotton directly to the consumer and these efforts will continue to be a part of their sustainability strategy.

"Being an enterprise citizen, we realize that we should take our social responsibility to our community. That's why we were very glad to join the Cotton LEADS™ program. We hope we can support the use of cotton from the Cotton LEADS™ program in our supply chain."

MR. CANGJIE LIN, EXECUTIVE VICE PRESIDENT AND BOARD MEMBER

Fruit of the Loom

Q&A with Tony Pelaski, Executive Vice President and Chief Operating Officer



Tony Pelaski (right) says the Cotton LEADS™ program matches Fruit of the Loom's vision for an environmentally friendly supply chain.

Q: You have been to a cotton farm. What did you think?

A: I was impressed with the technology and investment by the cotton farmers in making sure they not only grow the highest quality cotton, but also protect the environment and the natural resources on their farms. The soil and moisture monitoring, as well as the equipment investment required, has evolved over the past 20 years. I was really impressed with the efficiency improvements they have made to make sure our cotton is not only sustainable, but cost effective.

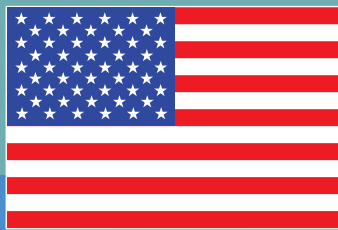
Q: What does sustainability mean to Fruit of the Loom?

A: It is making sure every touch point in our supply chain is efficient in the consumption of resources, from the energy to drive our process, to the water we consume and the effluent released. It's about making sure everything we do doesn't just meet environmental standards, it far exceeds them – anywhere in the world that we operate.

Q: Why did you join the Cotton LEADS™ program?

A: Environmental sustainability is important to us because it is important to our consumers. Our consumers are very concerned about the raw materials and everything in our supply chain. It was clear to us that the vision of the Cotton LEADS™ program matched our vision for an environmentally friendly supply chain – making sure we are fully transparent to our consumers about the raw materials in our supply chain. It was a natural fit that aligned with our core values and principles. It delivers on our promise to our consumers.





Country Report – USA

CROP REPORT

ANNUAL U.S. COTTON PRODUCTION 2017/2018

Avg Yield – 908 lb/acre

Acres Harvested – 11.51 million

Bales Harvested – 21.76 million



Increasingly, consumers around the globe want assurance that their food and textiles are produced responsibly. They are concerned about the future of the planet, and the U.S. cotton industry shares those values. With the world population estimated to reach 9 billion by 2050, the U.S. industry is doing its part now to find new ways to improve the environment while producing more.

The U.S. cotton industry's efforts go beyond the cotton field. Farm families work to protect the land cotton is grown on as well as the entire farm. The farm or ranch's footprint includes acreage for other crops, farm animals, pasture land, wetlands, woodlands, wildlife and living areas for families, homes, gardens and recreation.

Cotton is seldom grown as a mono-crop in the U.S. Since cotton is farmed as a multi-crop, it encourages leveraging with other commodities that share the same stewardship efforts. For example, the industry partners with the food and fiber supply chain through the Field to Market Coalition (FTM) for Sustainable Agriculture. FTM is dedicated to promoting sound science, developing metrics impact and charting a path for continuous improvement. With more than 125 major organizations, including brands and retailers, agribusiness, government research organizations, wildlife and conservation civil society groups, the Coalition ensures they all are working toward continuous improvement.

The FTM coalition developed measurement tools for growers to assess their own fieldprint using the web-based FieldPrint® Calculator, and it is developing verification programs to chart field-level progress over multiple years. The alliance has analyzed independently collected survey data, which has documented clear progress in reducing cotton's environmental footprint. Following decades of steady progress, the U.S. cotton industry now is setting its sights even higher.

Image by McMichen Farms, Plaza Transport

U.S. Cotton Sets National Sustainability Goals

In 2017, a Cotton Industry Sustainability Task Force was formed to focus on long range strategic goals for sustainability. The task force, made up of leaders from all industry segments including farmers, ginners, warehouse, cottonseed handlers, merchants, cooperatives and U.S. spinning mills, came together to frame 10-year goals for continuous improvement. The group identified six key performance indicators for cotton, on which to establish a baseline and set new targets.

The task force set objectives for advances in land use efficiency, soil conservation, water use efficiency and soil health, as well as reducing energy and greenhouse gasses. The goals were adopted by the National Cotton Council's (NCC) board of directors as nation-wide industry policy. The NCC is the unifying force of all seven segments of the U.S. cotton industry including 74 regional and state interest organizations.

The recommendations of the task force were grounded in sound science and aided by a focus group including some 20 cotton scientists, economists, engineers, textile specialists and sustainability experts. The diverse group of researchers, organized by Cotton Incorporated, was asked to push the boundaries of science, technology and productivity to new heights.



"The goals are meant to continue the trend of improvement and to bolster efforts through setting new reductions. By announcing these goals, the industry is committing to public accountability and transparency in its continued journey of sustainability."

TED SCHNEIDER, LOUISIANA PRODUCER AND CHAIRMAN OF INDUSTRY-WIDE SUSTAINABILITY TASK FORCE

2025 GOALS TO FURTHER REDUCE U.S. COTTON'S ENVIRONMENTAL FOOTPRINT

▼ 13% Land use – area need to produce a bale of cotton

▲ 50% Soil conservation – all fields in balance with new soil formation

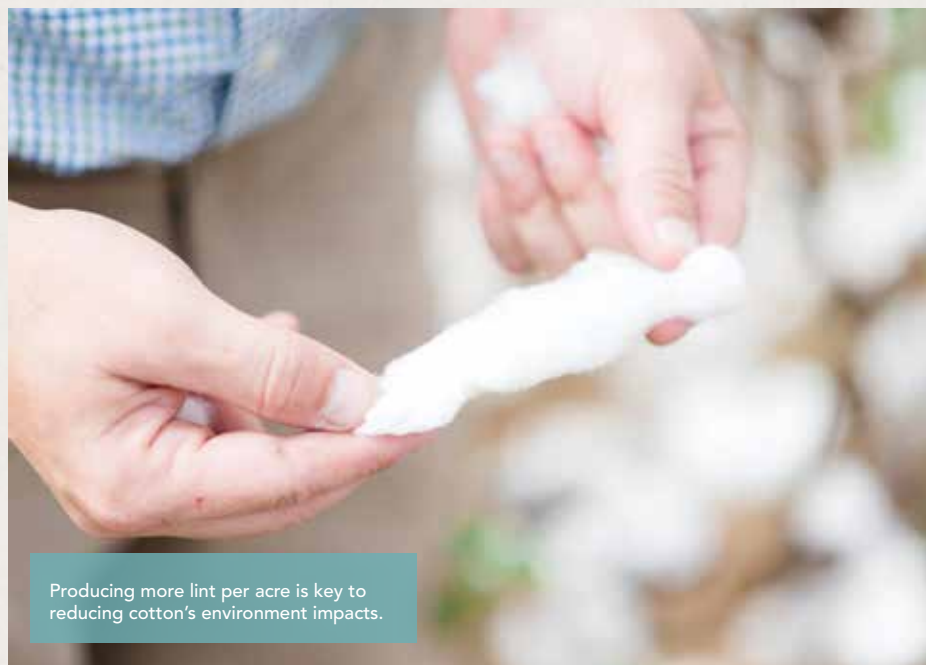
▲ 18% More fiber per gallon of water

▼ 39% Reduced greenhouse gas emissions per pound of fiber

▲ 30% Increase soil carbon – number of fields that build carbon

▼ 15% Reduce energy to produce and gin a pound of fiber

Road Map to Goals



Producing more lint per acre is key to reducing cotton's environment impacts.

Charting a path to reach new targets requires the development of a strategic research and education plan to meet the KPIs for each goal.

Reducing the number of acres required to produce a bale of cotton by 13% can be achieved through the complex interaction of many disciplines: plant physiology and pathology, entomology, agronomy, soil science, and agricultural and biological engineering to name a few. There is a need to increase the speed of releasing new varieties to improve yields, reduce inputs and make the cotton plant more resilient. Advances in plant breeding using conventional breeding in combination with developing a gold standard for sequencing the cotton genome will aid in accelerating variety development. By combining conventional selective breeding with modern targeted molecular biology, practical solutions can be developed faster than either of the methods alone. The future will incorporate the new process of gene editing, still in its infancy, to move naturally occurring genes within the genome.

Reducing greenhouse gasses is part of the U.S. cotton industry initiative to deal with unpredictable and extreme effects of weather. While GHG emissions reductions add new dimensions to its research agenda, the U.S. cotton industry has set its 10-year goal for reducing GHG by 39%. The goal parallels agricultural reduction targets set in the Paris climate accord agreements. Cotton scientists participating in the workshop believe that reaching the GHG target is achievable with a multifaceted focused research agenda of improvements in energy use, advanced genetics, enhanced soil health, research on the 4 Rs of nutrient management, and low energy precision water application systems.

Amassing soil carbon is essential to meeting new productivity and efficiency goals. Increasing the number of fields that employ practices to increase soil carbon is one of the metrics used to gauge industry's progress on this goal. The industry objective of increasing by 30% the number of fields to be carbon-positive can be done by an emphasis on conservation tillage, effective cover crops and high residue management.



Tools and technology to improve supplemental irrigation will help U.S. growers achieve the goal to become more water efficient.

More fiber from a gallon of water is a bold undertaking. Two thirds of U.S. cotton is grown solely with rainfall nature provides. Finding new ways to capture excess rainfall and make it available in times of deficit is a high priority. Making the plant more tolerant to extremes of water stress, whether flooding or drought, is needed to add resilience. Research will be conducted to fine tune small amounts of supplemental irrigation to dramatically reduce risks of crop failure. A reduction of 18% of the water used to produce a bale of cotton is achievable.



Educating Cotton LEADS™ partners about soil health and biodegradability: naturally degraded cotton (white) underwear always beats synthetic (blue).

Energy used to produce a pound of cotton has been documented in the life cycle analysis of cotton. Compared to the energy needed to make manmade fibers, cotton's use of fossil fuels is low. Even when accounting for embedded energy of tillage and inputs of manufactured plant protection and fertilizer products, the energy used to produce cotton is continually reducing. When the energy of the oil extracted from cottonseed is considered, the cotton plant is distinctly energy-positive. Nevertheless, the U.S. cotton industry's goal is to reduce dependence on fossil fuels even further. Increasing effectiveness of nutrients, precise placement of plant health products and enhanced genetics will help reach the 15% energy reduction goal.



Soil conservation is about landscape management. The goal is to decrease soil losses to water and wind erosion by 50% to reach sustainable levels. Innovative farmers are already demonstrating that refined management tools such as conservation tillage, soil cover crops, nutrient management, contour planting, land leveling and water management structures are proving effective in saving soils, so new soils are generated faster than that lost to erosion.

RESEARCH FOR PROFITABLE SOLUTIONS AND REDUCED IMPACT

406 Direct managed outside research and education projects funded by industry

167 U.S. research and education projects supported by qualified states support groups

\$10m Funding allocations by industry organizations

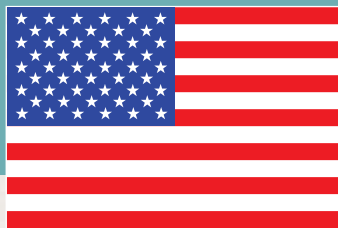
Educational Tools to Implement Best Practices

As technologies are released and proven through research, getting new tools and management practices in the hands of farmers is important to the overall industry strategy. The U.S. supports a vast network of extension specialists, employed by the state universities, who provide on-ground support to farmers and farm organizations.

In addition, digital media such as the Plant Management Network (PMN) is increasingly being used for technology transfer. Cotton Incorporated is developing plans to expand efforts with the PMN, an online publishing service. The PMN has a history of success in enhancing the health, management and production of agricultural crops. These efforts with the PMN will feature webcast modules to support moving the national average for each KPI to the 10-year goal. Modules, developed by researchers and extension scientists, will concentrate on translating research findings to on-farm practices and explaining how the practices impact KPIs. A special emphasis will be on overcoming barriers to adoptions aimed at reducing input costs and preserving yield.

"The U.S. cotton industry will assess environmental impacts of the KPIs using science-based metrics and benchmarks developed by Field to Market: The Alliance for Sustainable Agriculture. While the goals are aspirational, they are doable."

DAHLEN HANCOCK, TEXAS PRODUCER, CHAIRMAN OF COTTON INCORPORATED



Case Studies – USA



Cotton farmers, like RN Hopper, know the strength of their cotton community depends on the sharing of cost and environmental savings innovations.

GROWER CASE STUDY

RN Hopper Hosts Field Day to Share Residue Maintenance System

From Petersburg, Texas, RN Hopper is one cotton grower who is passionate about improving cotton's environmental footprint.

The region has limited rain, irrigation water and soils historically low in organic matter. Without the water to grow high-residue cover crops, such as cereal rye, RN uses no-till and a corn-wheat-cotton rotation to keep his soil covered all year long. If extra residue is needed, he carefully meters out the soil water or irrigation to grow residue on the least amount of water.

His residue maintenance system has evolved over 20 years of missteps and successes, but for the past four years he has hosted a field day on his farm to help neighbors avoid missteps, see the equipment needed and walk fields. RN also supports a massive amount of research on his farm with local university scientists, USDA-NRCS and irrigation consultants, who present their results at his field day. In addition to reaching 150 local growers with his field day, RN joined a Citizen Scientist program in 2017 with university soils and climate scientists to allow more growers to create conservation tillage production practices on their own farms that maximize rain water efficiency in this arid region. And in 2018 RN will launch a two-day short course on 'getting started in conservation tillage'—all with the goal of making cotton competitive.



Donny Lassiter is an early adopter of big data technology that has enabled him to grow more with less.

GROWER CASE STUDY

Donny Lassiter is Investing in Farming's Future

For cotton farmers like Donny Lassiter, leaving less of his crop to luck and more to technology has paid off.

Donny grows a range of crops on his family farm in northeastern North Carolina, from cotton to peanuts, wheat to soybeans, corn, pumpkins and chufa.

By adopting new farming technology over a decade ago, Donny's been conserving not just natural resources but also financial ones. He's found that good environmental practices are also good economics, saying, "it's worked out well for everyone". Donny uses GPS technology to reduce annual fertilizer waste. The device keeps the machine straight and cuts off the sprayer when it goes out of bounds, easily delivering a more precise application. By only using fertilizer where it's needed, he's using 25% less.

You'll find him using more organic fertilizers, no-till farming, and winter cover crops to maintain the structure of the soil for spring cotton planting. And he's even experimenting with flying drones over the farm to scout crops and manage pests, as well as mapping the soil with infrared imagery to develop crop fertility plans.

By being open to a trying new methods and technologies, Donny's been able to "ride the wave of progress or even get out a little bit ahead". And by sharing his learnings with other farmers in the region, he's able to impact the local industry for the better.

For cotton farmers like Donny, growing a more successful future for everyone is always worth the investment.

RESEARCHER CASE STUDY

Dr. David Stelly Delivers Genetic Breakthroughs for Cotton

With four decades of experience spanning cytogenetics, germplasm introgression and genomics, Dr. David Stelly's focus has been on the introgression of wild species to increase the genetic diversity of cotton.

His research was instrumental in the development of the CottonSNP63K Array, which enables high-quality genotyping of breeding materials. With Dr. Stelly's research, the cotton community is able to better connect genotype (cotton's genetic code) with phenotype (performance in the field) in order to develop new cotton varieties that are higher yielding with lower inputs.

Dr. Stelly is the recipient of the 2017 ICAC Cotton Researcher of the Year award. He has authored or co-authored 150+ publications, is Past Chairman of the International Cotton Genome Initiative and Past President of the National Association of Plant Breeders (NAPB). Twice, he has been awarded the Cotton Genetic Research Award.



Dr. David Stelly is a leader in cotton genomics.



10,000 different lines of exotic germplasm are kept within the USDA's National Cotton Germplasm Collection.

COMMUNITY CASE STUDY

Cotton Seeds for the Future

Maintaining seeds of native and wild cotton is an essential service for global cotton.

When cotton geneticists and breeders from around the globe need an exotic gene with a trait for disease resistance, fiber strength or drought tolerance in their breeding program, they order seeds from the National Cotton Germplasm Collection. Ten thousand accessions, collected from around the world, are kept safe in this gene bank. Without the collection, many of the exotic seeds and their desirable alleles would be lost, never again to be available for future generations.

Seeds in the USDA repository are kept viable, characterized and catalogued for key properties and made available to geneticists and breeders. Plant breeders must plan many years into the future as they know that a diverse gene pool is essential to maintaining strong varieties. The collection allows the possibility of discovering the genes that confer resistance that may protect cotton's future.

"Our national cotton germplasm collection shares seeds around the world. However, it is only useful if it is properly characterized and has viable seed in desirable quantities. Keeping this collection is an insurance policy against extinction of many of these lines."

**DON JONES, COTTON INCORPORATED
AGRICULTURE DIRECTOR OF GENETIC
RESOURCES**



Country Report – Australia



The Australian cotton industry remains firmly committed to sustainability and continuous improvement. Today, Australian cotton growers grow more cotton on less land, with more efficient water use and less impact on the environment than ever before.

ACHIEVEMENTS IN 2017

Significantly boosted the number of growers using *myBMP* (Best Management Practices)

\$22 million in additional R&D investment for 2017-18 across 200 new projects

Whole-of-industry Workforce Strategy endorsed and underway



myBMP growers, the Commins family

These achievements have been gained incrementally, over decades, and have required an all-of-industry response to the challenges posed by cotton production. At the core of Australian cotton's success are two key factors: a sustained commitment to cotton research and development, and the industry's *myBMP* program (Best Management Practices).

Transparency, collaboration, resilience and a willingness to engage with communities, government, NGOs and other agricultural sectors are also key ingredients to success.

The Australian cotton industry benchmarks and collects sustainability metrics across the whole industry that clearly show practice change and significant reductions in major inputs such as water and pesticides. The majority of Australia's cotton farmers are using best practice, regardless of whether or not they've achieved full *myBMP* certification.

Cotton Australia and the Cotton Research and Development Corporation (CRDC) have continued to protect the important commitment to matched government funding for research and development. For the 2017-18 research funding round, the CRDC Board approved \$22 million in research investment for 200 projects.

THE AUSTRALIAN COTTON INDUSTRY

Is dedicated to becoming the producer and supplier of the most environmentally and socially responsible cotton in the world.

Aims to be a global leader in sustainable agriculture by investing in research and development and reporting against recognized sustainability indicators.

Is committed to delivering independent, evidence-based assessments of its sustainability and environmental performance and communicating this with a common voice.

myBMP Update

Cotton Australia's work to encourage grower engagement with myBMP is accelerating, with more than 75% of cotton farms now registered in the system and more than 15% of Australia's cotton crop produced by fully certified farms. myBMP helps growers reduce on-farm risk, meet regulatory requirements, implement industry best practice and improve business management.

myBMP is structured into 10 modules covering all areas of Australian cotton production including:

BIOSECURITY – Avoidance, management and control of pests and diseases

ENERGY AND INPUT EFFICIENCY – Efficient energy inputs such as electricity, fuel and fertilizers

FIBRE QUALITY – Growing the best quality cotton possible

HR AND WORKPLACE HEALTH AND SAFETY (WHS) – Managing employees and contractors while providing a safe workplace

INTEGRATED PEST MANAGEMENT (IPM) – Management of pests, weeds and diseases

SUSTAINABLE NATURAL LANDSCAPE – Managing the vegetative and riparian assets on farm

PESTICIDE MANAGEMENT – Pesticide management, storage and use on farm

PETROCHEMICAL STORAGE AND HANDLING – Managing fuels and lubricants on farm

SOIL HEALTH – Maintaining and/or improving soil quality

WATER MANAGEMENT – Water quality, efficiency of storage and distribution

The past year has seen particular effort by the Cotton Australia and CottonInfo teams to work together to achieve more engagement with the program. In the past year, the number of growers registered in myBMP grew by 16% and 170 cotton farms are now fully myBMP-certified.

Improving the livelihoods of Australian farmers and their communities.

The benefits of Australian cotton's sustainability program are felt at many levels in Australia, including on the farm, at a whole-of-industry level and in more than 150 communities in NSW and Queensland where cotton is grown. The outcomes of Australian cotton's commitment to myBMP and a transformational change in the production system includes:

Pesticide use decreased by more than 90% in the past decade, making workplaces safer and drastically reducing the impact on the natural environment

Water use efficiency increased by 42%

Yields increase year on year – Australia produces yields three times the world average

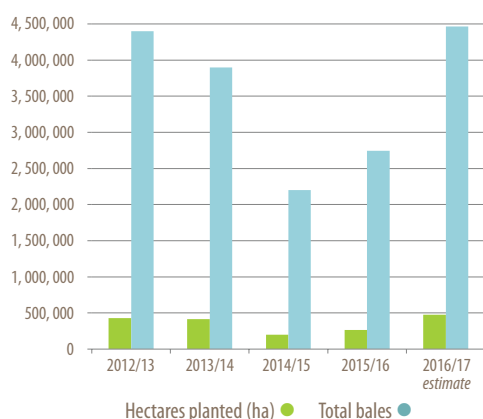
Land use efficiency gains – 30% less land needed to grow a tonne of Australian cotton compared to a decade ago

42% of farm area is dedicated to native vegetation and biodiversity management

Continuous improvements in quality – including low contamination

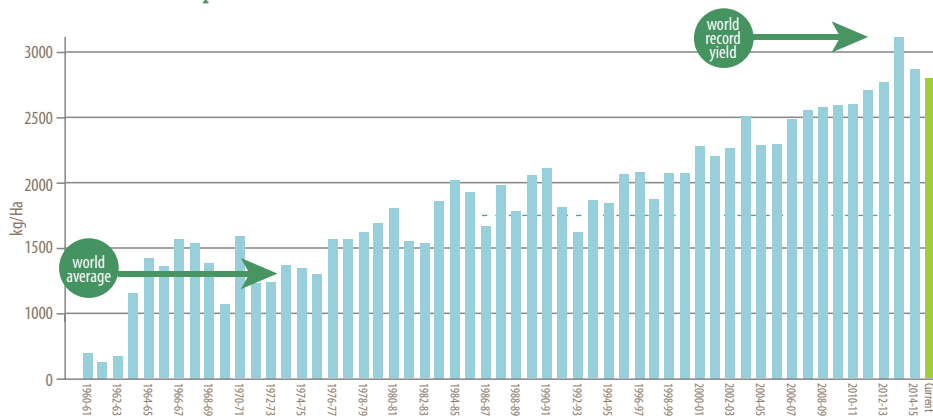
The average cotton farm in Australia employs 6.6 people and in non-drought years it's estimated the industry employs more than 10,000 people. Cotton is a major commodity, representing 30 to 60 percent of the gross value of the total agricultural production in regions where it is grown

Australian Cotton production – 5 years



Number of hectares of Australian cotton planted and bales produced over the past five years.

Australian cotton production since 1960



Australia's cotton growers produce yields three times the world average.



Country Report – Australia

Keeping Our Workers Safe

Safety is an important component of every cotton farming operation. To help growers keep families, staff, contractors and visitors safe, Cotton Australia delivered its annual CottonSafe campaign. Safety resources and templates engage workers and contractors to help them identify and assess hazards on farms, and to develop and implement plans and procedures to minimize risks.

Cotton Australia's resources are linked to the industry's myBMP program, specifically its modules on human resources and WHS, pesticide management and petrochemical storage and handling. These modules provide growers with practical safety tools to implement best practice on farm.



CottonSafe workshop delivered in Dalby, Queensland.

Building Capacity

Each year, Cotton Australia, the CRDC and other industry bodies support a number of leadership programs to increase the capacity of the cotton workforce now and into the future, including to build the skills of emerging leaders.

These programs include:

The Australian Future Cotton Leaders Program for 15 emerging cotton industry leaders to develop leadership knowledge, skills and experience

The Peter Cullen Water and Environment Trust's Science-to-Policy Leadership Program for individuals currently working in the science, policy or management of water

Nuffield Australia Farming Scholarships for exemplary cotton growers or farm managers

The Australian Rural Leadership Program for established leaders currently working in or for the Australian cotton industry



Nuffield Scholars Matt (left) and Adam McVeigh



Leading the Way on Cotton's Social Agenda Industry-wide Workforce Plan

The Australian cotton industry recognizes that people are at the heart of sustainability, and that they are the industry's greatest asset. Late last year, a whole-of-industry workforce strategy was endorsed, setting a clear plan for delivering priority on-farm workforce needs. Cotton Australia is now implementing this strategy, with key activities including Workplace Health and Safety workshops for growers.

Sharing Knowledge to Problem Solve Together

Cotton Collective Industry Forum Unites the Industry

More than 500 cotton growers from across Queensland and NSW gathered in Griffith (Southern NSW) in August to discuss issues of importance facing the industry and catch up on the latest developments in sustainable farming.

The two-day Cotton Collective Industry Forum covered a huge range of topics, from research and development, connected agriculture and technology, to positioning Australian cotton in the world fibre market.

According to Cotton Australia CEO, Adam Kay, this event is a critical engagement opportunity.

"The 2017 Cotton Collective brought together the whole industry to discuss the most important issues facing growers," Mr. Kay says. "It was also an extremely valuable forum for those in the industry to learn about the latest technology, which is crucial to maintain the industry's high standards for productivity and efficiencies."



Cotton Australia's Brooke Summers presenting at the Cotton Collective Industry Forum



Case Studies – Australia

LEADING THE WAY: INTEGRATED PEST MANAGEMENT

Andrew Watson, Cotton Grower, Boggabri NSW

Australian cotton grower Andrew Watson has not sprayed an insecticide (apart from research trials) on his cotton in the past 12 years of cotton growing on the family farm east of Boggabri in the Namoi Valley. Andrew is a leader in the adoption of Integrated Pest Management and the aim of his management style is to protect and build up populations of beneficial insects and other predators on the farm as a way to manage pests.

Andrew and his agronomy team carefully measure and monitor both insect pests and beneficial insects found in the crop during the season, and these records are used to make decisions.

Even in this past season of high insect pressure across all valleys, Andrew didn't record any pests that were over the thresholds, a measurement for when pest levels become high enough to apply a pesticide.

Simply put, "We don't spray because we don't go over thresholds, and I put a lot of this down to preserving our beneficials and other predators," Andrew says.



Boggabri cotton grower Andrew Watson uses Integrated Pest Management on his farm in Baggabri, NSW.

"If I were to go back 12 or 13 years ago when we started counting insect pests and beneficials and were going no spray, we saw mirids and green vegetable bugs regularly in our check sheets. I haven't seen a vegie bug in about six years and we don't see reports of pests above threshold, yet we did when we first started."

Andrew puts his success down to a number of factors including the preservation of native vegetation to harbour predators, understanding of the cotton plant, trust in industry research and the ability for the cotton plant to compensate for insect damage.

Source: CRDC's Spotlight Spring 2017, www.crdc.com.au/spotlight, photo by Melanie Jenson

LEADING THE WAY: GOING SOLAR TO IMPROVE EFFICIENCIES

Andrew Gill, Cotton Grower, Narromine NSW



Narromine, NSW cotton grower Andrew Gill has installed a 400-panel solar diesel hybrid pump to cut energy use.

The installation of a 400-panel solar diesel hybrid irrigation bore pump on a 300-hectare cotton farm in Central West New South Wales has led to cuts in fuel costs, greater irrigation efficiencies, and a massive reduction in greenhouse gas emissions.

Attracted by the drop in the price of solar panels and the prospect of the system paying for itself in less than four years, Andrew Gill and his family decided to install a solar diesel hybrid system at one of the pump sites on their Narromine farm. The move has slashed diesel use by between 45,000 and 55,000 litres a year. Over 25 years, that equates to a saving of more than 1 million litres of fuel and a reduction of more than 3000 tonnes in carbon emissions.

According to Andrew, this technology was a win-win that included both environmental and financial outcomes.

"Solar is a way for us to have a better handle on what our input costs are going to be throughout the next 20 years of production. It is not often you can get that level of foresight," he said.

Andrew said he was continuing to look into ways to fine-tune the system and improve its efficiency. Convinced that solar is the way of the future, he plans to introduce more solar pump stations throughout the farm.

The CottonInfo team is now looking to share the outcomes of this project with others in the industry, as a way of reducing overall emissions and promoting cost savings.

Source: CottonInfo, www.cottoninfo.com.au/publications

LEADING THE WAY: MANAGING RESISTANCE IN GM COTTON

**Dr. Sharon Downes,
Cotton Research Scientist, Narrabri NSW**

The use of GM technology in the Australian cotton production system has led to a significant reduction in pesticide use, when paired with the industry's leading Integrated Pest Management strategies. Successfully managing resistance over a 20-year period has required an industry-wide approach based on cutting-edge research.

Dr. Sharon Downes leads CSIRO Food and Agriculture's IPM and Resistance Evolution research team. She has been located at the Australian Cotton Research Institute since 2004, and has made a significant contribution to the Australian Cotton Industry through her work on resistance evolution in *Helicoverpa* to the toxins contained in Bt cotton.

This includes resistance monitoring data that allows the industry to judge how to effectively manage and adapt the Bt Resistant Management Plan (RMP) for Bt cotton. Dr. Downes has made a significant contribution to establishing robust and practical strategies for managing resistance in Australia for both Bt cotton and the insecticides used to control all insect pests.



Dr. Sharon Downes of the CSIRO is a leader in integrated pest and resistance management.

Source: CottonInfo, www.cottoninfo.com.au/publications



Sean Boland, Auscott Midkin farm manager

LEADING THE WAY: VALUING RIPARIAN ASSETS

Auscott Midkin, Moree NSW

It's been 14 years since work on the regeneration of riparian areas was initiated at Auscott's 'Midkin' property back in 2001 as part of the company's commitment to myBMP. Bordering an adjacent creek, the riparian areas – made up of native vegetation – cover almost a quarter of the property.

The method of regeneration was to cease dryland farming and grazing in areas close to the creek to allow the country to rejuvenate naturally. Non-native grasses and weeds were also controlled to promote the regrowth of native vegetation.

Auscott CEO Harvey Gaynor, who was Midkin farm manager at the time, says the approach to regeneration was to "let nature take its course".

"We tried to work with nature rather than recreating it," said Harvey. "By leaving the land alone, it regenerated itself the way nature intended. We didn't plant any trees or grass, but allowed natural regrowth, which occurred largely after a single flood event."

"When necessary we tried to recreate nature as best we could, which led to the selective clearing of the Coolibah tree species to create diversity in the age, size and number of Coolibah and other tree and grass species," he said.

Retention and improvement of native vegetation is an important component of the Australian cotton industry's myBMP program.

Source: CottonInfo, www.cottoninfo.com.au/publications



Founding Organizations



The Cotton Foundation

The Cotton Foundation's overall mission is to strengthen U.S. cotton's position in the highly competitive fibre market. The Cotton Foundation gives U.S. raw cotton's agribusiness allies opportunities to support the U.S. cotton industry by supporting general research and education projects.



Cotton Australia

Cotton Australia is the peak body for Australia's cotton growing industry, advocating on behalf of more than 1200 cotton farming families in NSW and Queensland. The organisation fosters a world-class agricultural industry that's sustainable, valued for its economic and social contributions, and produces a top-quality product in demand around the globe.

Supporting Organizations



Australian Cotton Shippers Association

The Australian Cotton Shippers Association is an association of cotton merchants. ACSA members are engaged in the entire cotton supply chain from field to processing at the gin, to cotton classing, warehousing, shipping and delivery to final consumer. ACSA represents the interests of the cotton industry specifically in relation to the procurement and marketing of the Australian cotton crop.



National Cotton Council of America

The National Cotton Council of America's mission is to ensure the ability of all U.S. cotton industry segments to compete effectively and profitably in the raw cotton, oilseed and U.S. manufactured product markets at home and abroad. The organisation is the unifying force in working with the government to ensure that cotton's interests are considered.



Cotton Incorporated

Cotton Council International (CCI) is the export promotion arm of the National Cotton Council of America. CCI's mission is to increase exports of U.S. cotton, cottonseed and U.S.-manufactured cotton products through activities that affect every phase of the marketing supply chain.



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Cotton LEADS™ Partners

The following are Cotton LEADS™ partners as of December 2017. The Cotton LEADS™ program would like to sincerely thank these companies for their support and engagement. Thank you for LEADING THE WAY to responsible production and sourcing.

#

1888 Mills, LLC

A

AD.V Co. Ltd.
Advance Denim Co., Ltd.
AEC Textile Co., Ltd.
AEON Topvalu (China) Co., Ltd.
Aeon Topvalu Co., Ltd.
Aéropostale, Inc.
Akcanlar Tekstil San. Tic. A.S.
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Algodonera Continental SAC
Algodonera Peruana SAC
Al-Karam Textile Mills Pvt. Ltd.
Alperteks Mensucat San. Tic. A.S.
Alps Industries Limited
Aman Spinning Mills Ltd.
Amana Woolen Mill
Amber Cotton Mills Ltd.
Ambika Cotton Mills Limited
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Anita's Textiles Ltd.
Antex Knitting Mills
Apex Lingerie Ltd.
Apex Spinning & Knitting Mills Limited
Apex Textile Printing Mills Limited
Artexil S.A.
Arun Textiles Pvt Limited
Arvind Ltd
Asia Merchandising (H.K.) Ltd.
Atlantic Mills (Thailand) Co., Ltd.
Aztex Trading, S.A. de C.V.
Azul Textil S.A.

B

Baby Fresh
Badsha Textiles Ltd.
Barnhardt Manufacturing
Batuhan Pazarlama
Becktel SA de CV
Bell and Barnett
Bengal Knittex Ltd.
Bengal NFK Textiles Limited
Besler Tekstil San. Tic. A.S.
Best Corporation (P) Limited
Beximco Ltd.
Black Peony (Group) Co., Ltd.
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Bondex Group Limited
Bossa T.A.S.
Brandix Textiles Ltd
Brooks Brothers Group, Inc.
Bros Eastern Co., Ltd.
Buhler Quality Yarns, Corp.
Burtteks Tekstil San. Tic. A.S.

C

C.I. Integrated Apparel Solutions S.A.
Caliphil Enterprise Co., Ltd.
Camisas Finas De Hidalgo SA de CV
Cargill Cotton
Carolina Cotton Works
Carolinas Cotton Growers Cooperative
Carter's Global Sourcing Limited
Casablanca International Ltd.
Cayota Industrial, S. de R.L. de C.V.
Central Marketing Group
Changshu Huamao Textile Technology Co., Ltd.
Changshu Huashang Garment Co., Ltd.

Changshu Zhongjiang Import & Export Co., Ltd.
Changshu Fucheng Craft Silk Fashion Co., Ltd.
Changzhou Huajie Apparel Co. Ltd.
Changzhou Qunda Textile Materials Co., Ltd.
Chedraui Textil SA de CV
Chenille Textiles Co., Ltd.
Chia Her Industrial Co., Ltd.
Chiem Patana Textiles Co., Ltd.
China Brands Group
Chonbang Co., Ltd.
Chun Au Knitting Factory Limited
Chung Shing Holding (China) Co., Ltd.
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Cone Denim (Jia Xing) Ltd.
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Cotswold Industries Inc.
Cotton Homey Co., Ltd.
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D

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Denim North America
Dezhou Huayuan Eco-Technology Co., Ltd.
Dezhou Yuanji Textile Co., Ltd.
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Distribuidora Textil Arttex SA De CV
Dongguan Kefang Textile Co., Ltd.
Dong-Il Corporation
DONG-IL VIETNAM CO. LTD.
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E

Edwin Co. Ltd.
El Rosario de Puebla, S.A. de C.V.
Emin tekstil San. Tic. A.S.
Ensar Tekstil San. Tic. A.S.
Esquel Group
EVSU Group Limited
Exclusive Bettwasche Gebr. Graser GmbH & Co. KG

F

Fábrica de Tejidos Pisco, S.A.C.
Fábrica de Tejidos Pisco, S.A.C.
Feroze 1888 Mills Ltd.
Ford Glory Limited
Foshan City Shunde Caihui Textile Co., Ltd.
Foshan Season Textile and Garment Co. Ltd.
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Fujian Septwolves Industry Co., Ltd.
Fung Fat Knitting Mfg. Ltd.
Fuzhou Xianglong Textile Co., Ltd.

G

Garment 10 Corporation JSC
Gef

Gerber Childrenswear LLC
Getzner Textil AG
GHCL Limited
Ghim Li Global Pte Ltd.
Gildan Activewear Inc.
Global Denim
Global Dyeing
GoldDaio (Suzhou Industrial Park)
Hygiene Products Co., Ltd.
Goldfame Enterprises Limited
Grameen Knitwear Ltd.
Green Textile Co., Ltd.
Growthy Textile Ltd.
Grupo Industrial Miro
Grupo Iris Textiles, S.A.
Grupo Romatex, S.A. de C.V.
GTN Group of Companies
GTN Industries Group
Guangdong Best'n Fashion Clothing Co., Ltd.
Guangdong Zhonghua Cotton Textile Industry Co., Ltd.
Guangzhou Fangfang Fashion Design Co., Ltd.
Guangzhou Miidii Apparel Co., Ltd.
Guangzhou Zengcheng Guangying Garment Co., Ltd.
Guntas Gunduzbey Iplik A.S.
Gunze Limited

H

H.W. Textiles Co., Ltd.
Ha-Meem Denim Ltd.
Hamid Fabrics Ltd.
Hamid Fabrics Ltd.
Handsome Textile Ltd.
Hanesbrands Inc.
Hangzhou Lianchenghuazhuo Industrial Co., Ltd.
Hanoi Textile and Garment Joint Stock Corporation
Hansae Co., Ltd.
Hansoll Textile Ltd.
Has Dokuma San. Tic. A.S.
Hascevher Tekstil San. Tic. A.S.
Henan Pingmian Textile Group
Hermann Buhler AG
Hermin Textile Co., Ltd.
Hidratextil S.A. de C.V.
Hilasal (Textiles San Andrés)
Hilaturas Los Angeles, S.A. de C.V.
Hirdaramani Group
Hoa Tho Textile Garment Joint Stock Corporation
Homegrown Cotton, LLC
Hong Kong Knitters Ltd.
Huafang Co. Ltd.
Huafu Top Dyed Melange Yarn Co., Ltd.
Hue Textile Garment J.S.C
HUGO BOSS AG
Hursan Havlu Uretim San. Tic. A.S.

I

Ilbena Shanghai Technical Textiles Co., Ltd.
Idrees Textile Mills Ltd.
Ilshin Spinning Co., Ltd.
IMAP Export S.p.A.
Imperial Group Guatemala
Indera Mills
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Indus Dyeing & Manufacturing Co., Limited
Industrial Textil de Puebla

Industrias Apparel
Iskur Tekstil Enerji San. Tic. A.S.
Island Textile Mills

J

J. Wingfield
Jasonwood Jeans Corp., Ltd.
Jegen Textilien AG
Jiangmen Daxing Knitting Co., Ltd.
Jiangsu A-Z Group Co. Ltd.
Jiangsu Golden Morning Knitting Co., Ltd.
Jiangsu GTIG Eastar Co., Ltd.
Jiangsu GTIG Hubo Co., Ltd.
Jiangsu GuoTai GuoMao Co., Ltd.
Jiangsu Guotai Litan Enterprises Co., Ltd.
Jiangsu Taida Textile Co., Ltd.
Jiangsu White Rabbit Textiles Group Co., Ltd.
Jiangyin Alfa Apparel Co., Ltd.
Jiangyin City Shenli Knitting Co., Ltd.
Jiangyin Hengliang Textile Co., Ltd.
Jiangyin Liyang Textile Co., Ltd.
Jiangyin Quanshun Textile Co., Ltd.
Jihua 3509 Textile Co., Ltd.
Jihua 3542 Textile Co., Ltd.
JINBY Finery Co., Ltd.
Jo Ann Fabric & Craft Stores
Joe One Co., Ltd.
Jungwoo Vina Co., Ltd.

K

Kahee Co., Ltd.
KAIHARA Corporation
Kam Hing Piece Work Limited
Kamal Yarn Ltd.
Kang Na Hsiung Enterprise Co., Ltd.
Kangwal Textile Co., Ltd.
Karacasu Tekstil San. Tic. A.S.
Karim Spinning Mills Ltd.
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Kayser-Roth Corporation
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Keer Group
Keya Spinning Mills Ltd.
Kimpeks Tekstil
King America Textile Group
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Knit Asia Ltd.
Kohl's Corporation
KPR Mill Limited
Kunshan Wuzhou Jiasheng Clothing Co., Ltd.
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L

L.L.Bean
La Colonial Fabrica De Hilos S.A.
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Lai Tak Enterprises Limited
Le & Le Corporation
Linyi Aotai Textile Co., Ltd.
Linz Textil AG
Little Star Brands Group
Lives SAC
Liztex
Loma Lasetex SA de CV
Luckytex (Thailand) Public Company Limited
Luthai Textile Co., Ltd.
LWV Group Co., Ltd

M

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Marusan Industry Co. Ltd.
Masood Spinning Mills Ltd.
Matin Spinning Mills, Ltd.
Maxim Textile Technology Sdn Bhd
Menderes Tekstil
Menekse Tekstil
Menekse Tekstil San. Tic. A.S.
Minateks San. ve Tic. A.S.
Minh Dat Production Trading Service Co. Ltd.
Minh Tri Co. Ltd.
Mou Fung Limited
Mount Vernon Mills, Inc.
Multilink Sourcing Corporation

N

N9&PG Co., Ltd.
Nagina Group
Nahar Spinning Mills Limited
Nameson Group Limited
Nan Yang Textile Co., Ltd.
Nanjing Synergy Textiles Ltd.
Nantong Dongdi Textiles Co., Ltd.
Nantong Yiyi Interlining Co., Ltd.
Nazar Tekstil A.S.
Nesa Tekstil
Nevres Tekstil San. Tic. A.S.
New Jersey Enterprises Ltd.
New Project
New Wide Group
Newbale Clothing Pty Ltd
Newtech-Textile HK Ltd.
Nice Dyeing Factory Ltd.
Nien Hsing Textile Co., Ltd.
Ningbo Guangyuan Textile Co., Ltd.
Ningbo Peacebird Men's Wear Co., Ltd.
Ningbo Qiaotaixing Textiles. Co., Ltd.
Ningbo TREND Garments Co., Ltd.
Ningbo Veken Cotton Textile Co., Ltd.
Nitin Spinners Ltd.
Noi Solutions LLC
NuAngel, Inc.

O

OH POMP! Technofitted Jeans
Omega
One Jeanswear Group Inc.
Operadora LOB, S.A. de C.V.
Otto Stadtlander GmbH
Outpace Spinning Mills Ltd.

P

Pacific Textiles Ltd.
Pahartali Textile & Hosiery Mills
Pangrim Co., Ltd.
Pangrim Neotex Co., Ltd.
Panko Corporation
Panther Textiles Holding Co., Ltd.
Partex Rotor Mills Ltd.
Partex Rotor Spinning Mills Ltd.
Peru Fashions S.A.C.
Peru Pima, S.A.
Phong Phu Corporation
Pickett Hosiery Mills, Inc.

Plains Cotton Cooperative Association
Premier 1888 Ltd.
Premium Textile Mills Limited
Productora Liberihum, S.A. de C.V.
Prosperity Textile (HK) Ltd.
Protrade Garment JSC
PT Indorama Synthetics Tbx.
PT. Apac Inti Corpora
PT. Argo Pantas Tbk
PT. Bhineka Karya Manunggal
PT. Bitratex Industries
PT. Daya Manunggal
PT. Embee Plumbon Textiles Indonesia
PT. Grand Textile Industry
PT. Hakatex
PT. Harapan Kurnia Textile Indonesia
Pt. Indo TaiChen Textile Industry
PT. Lucky Abadi Textile Factory
PT. Lucky Print Abadi
PT. Natatex Prima
PT. Panca Bintang Tunggal Sejahtera
PT. Primayudha Mandirijaya
PT. Sri Rejeki Isman, Tbk.
PT. Tyfountex Indonesia
PT. Vigindo Intiusaha Perdana
PT. World Yamatex Spinning Mills
Punto Blanco

Q

Qiaode (Nantong) Textile Co., Ltd.
Qingdao Textiles Group Fiber Technology Co., Ltd.

R

R.E.P. Corporation
Ramatex Group
Ramco Group Textile Division
Reedisha Blended Yarn Ltd.
Reedisha Spinning Ltd.
Renfro Corporation
Rengitex Trading Pte Ltd.
Rhin Textil, SAC
Riva Representaciones, S.A. de C.V.
Ropa Sport S.A. de C.V.

S

S M Spinning Mills Limited
S.R. Spinning Co., Ltd.
SA Aanandan Spinning Mills (P) Ltd
Sae-A Trading Co., Ltd.
Saf Mensucat San. Tic. A.S.
Saitec International Vietnam Ltd.
Salek Textile Ltd.
Salfi Textile Mills Ltd.
Samil Spinning Co., Ltd.
Samil Vina Co., Ltd.
San Yang Textile Co., Ltd.
Sanyo Corporation Co. Ltd.
Sapphire Fibres Limited
Shahi Exports Pvt. Ltd. (Knits Division)
Shandong Huale New Materials Science And Technology Co., Ltd.
Shandong Ruyi Technology Group Co., Ltd.
Shangdong Dai Yin Textile Group Share Co., Ltd.
Shanghai Goodbaby Garment Co., Ltd.
Shanghai Imagine Home Textiles Co., Ltd.
Shanghai Konglong Textile Ornaments Co., Ltd.
Shanghai Lion City Textile Co., Ltd.
Shanghai MetersBonwe Fashion & Accessories Co., Ltd.

Shanghai Yihua Garment Co., Ltd.
Shelby Manufacturing de México, S.A. de C.V.
Shenzhen Baliso Industrial Co., Ltd.
Shenzhen PurCotton Technology Co., Ltd.
Shijiazhuang Changshan Ming Home Fashion Textile Co., Ltd.
Shijiazhuang Changshan Textile Co., Ltd.
Shohagpur Textile Mills Ltd.
Show Win Industries Limited
Shuford Yarns, LLC
Sing Lun Holdings Limited
Sintex Industries Limited (Yarn Division)
Sky Winner Investment Ltd. - Teelocker
Springs Creative Product Group
Square Yarns Ltd.
Sri Shanmugavel Mills (P) Ltd
Standard Textile
Staple Cotton Cooperative Association
Sumec Textile & Light Industry Co., Ltd.
Sumit SAC
Suntex Garment Laundry Factory
Suntex Industry Co. Ltd.
Sunvim Group Co., Ltd.
Supima
Sur Color Star, S.A.
Surplus (CH) Ltd.
Swift Spinning, Inc.

T

T.K. Garment Co., Ltd.
Taebong Co., Ltd.
Taekwang Industrial Co., Ltd.
Tafrid Cotton Mills Ltd.
Tah Tong Textile Co., Ltd.
Tah Yao Textile Co., Ltd.
Tai 1., Knit Denim Textile Co., Ltd.
Tai Yuen Textile Co., Ltd.
Taizhou Shunguang DUDS Co., Ltd.
Tak Sang (Sze's) Company Ltd
Tandem Textil
Target Corporation
Tat Fung Textile Co.
Tata Textile Mills Ltd.
TCE Corporation
Techno Spinning Mills Ltd.
Teeny Tiny
TekStyle
Texfina
Texhong Textile Group
Tex-Knit (Hong Kong) Co. Ltd.
Tex-Ray Industrial Co., Ltd
Textil del Valle S.A.
Textil Oceano, SAC
Textiles Brito
Textiles CM S.A. DE C.V.
Textiles La Libertad, S.A. de C.V.
Textiles Marie Lou, S.A. de C.V.
Textils San Ramon
Textufil, S.A. de C.V.
Teymur Tekstil San. ve Tic. A.S.
Thai Industries Development Co., Ltd.
Thai Martin Group
Thai Sin Dee Trading Co. Ltd.
Thai Textile Industry Public Co., Ltd.
Thanh Cong Group
The Life is Good Company
Theparerg Co., Ltd.
Thiagarajar Mills P Ltd
Thien Nam Development & Investment J.S.C.
THOMASTON MILLS, INC.

TJ Beall Company
Tony Wear Co., Ltd.
Top Star Textile Limited
Topitex Honduras S.A de CV.
TopiTop
Topknit Fabrics Australia
Topson Group (Intl) Holdings Co., Ltd.
Topy Top S.A.
Tritón Industrial, S.A. de C.V.
TS Factory
Tuong Long Textile Co., Ltd.
Turbo Yarn, S.A. de C.V.
Tusa Ring Isletmeleri San. ve Tic. A.S.
Tuscarora Yarns, Inc.
Twin Dragon Denim Mills

U

Union Jack (Beijing) Trade Ltd.
Unitika Ltd.
UNY Co. Ltd.
US Cotton México, S. de R.L. de C.V.
Uspar Tekstil. A.S..

V

Value Source International Co., Ltd.
VANCL Chengpin (Beijing) Technology Ltd.
Vardhman Textiles Limited
Velener Textil GmbH
Victory City Co., Ltd.
Viet Hong Textile J.V.C
Vincenzo Zucchi S.p.A.
Viyellatex Spinning Ltd.

W

Wah Fung Knitters Ltd.
Walmart
Weiqiao Textile Co. Limited
Welspun India Limited
Win Hanverky Textile Ltd.
Winner Medical (Hong Kong) Limited
Winnitex Ltd.
Wise Ever Enterprises Ltd.
Wrangler
Wuxi Far Eastern Textile Ltd.

X

Xiamen Xiafang Textile Co., Ltd.
Xinlong Holding (Group) Co., Ltd.

Y

Yamachu Mengyo Co., Ltd.
Yesim Tekstil San. ve Tic. A.S.*
Yichang Xinlong Sanitary Material Co., Ltd.
Yixing Lucky Textiles Group
Yoga Jeans
Yonca Iplik San. Ve Tic. A.S.
Youth Spinning Mills Ltd.
Yuen Shing Group
Yunus Textile Mills Ltd.

Z

Zagis USA, LLC
Zagis, S.A. de C.V.
Zaman Textile Mills Limited
Zeega
Zermatex, S.A. de C.V.
Zhejiang Charming Holding Co., Ltd.
Zhejiang Saint Angelo Apparel Co., Ltd.
Zhejiang Saintyear Textile Co., Ltd.
Zhu Cheng Chinatex G-Way Textiles Co., Ltd.
Zibo Yinshilai Textile Co., Ltd.



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