SUSTAINABLE FABRICS FROM LIQUID WASTE

AGM - 24 October 2019

THE TEXTILE INDUSTRY'S BEST KEPT SECRET

150 million trees are chopped down annually to make cellulose based fibres for textiles and that number is set to double in the next decade.

It's unsustainable;

- Commercially
- Environmentally
- Socially

CURRENT FIBRES ARE FACING ENVIRONMENTAL & COMMERCIAL PRESSURES

POLYESTER-NYLON-ACRYLIC

Non-biodegradable and made from non-renewable petroleum resources, that is energy intensive, toxic in processing and s difficult to recycle

Global market share 66%

COTTON

Requires large amounts of pesticides, water and land to grow. It is also a season crop

Global market share 27%

RAYON

Wood-pulping process is energy intensive, polluting and results in deforestation.
Rayon is a high growth market valued at US$16.3B in 2019,
Global market share 6% growing by 10% pa

- Future opportunities exist to take market share from cotton and synthetics

THE NANOLLOSE SOLUTION…

A WORLD FIRST TECHNOLOGY THAT TURNS LIQUID WASTE INTO RAYON FIBRES WITH MINIMAL ENVIRONMENTAL IMPACT

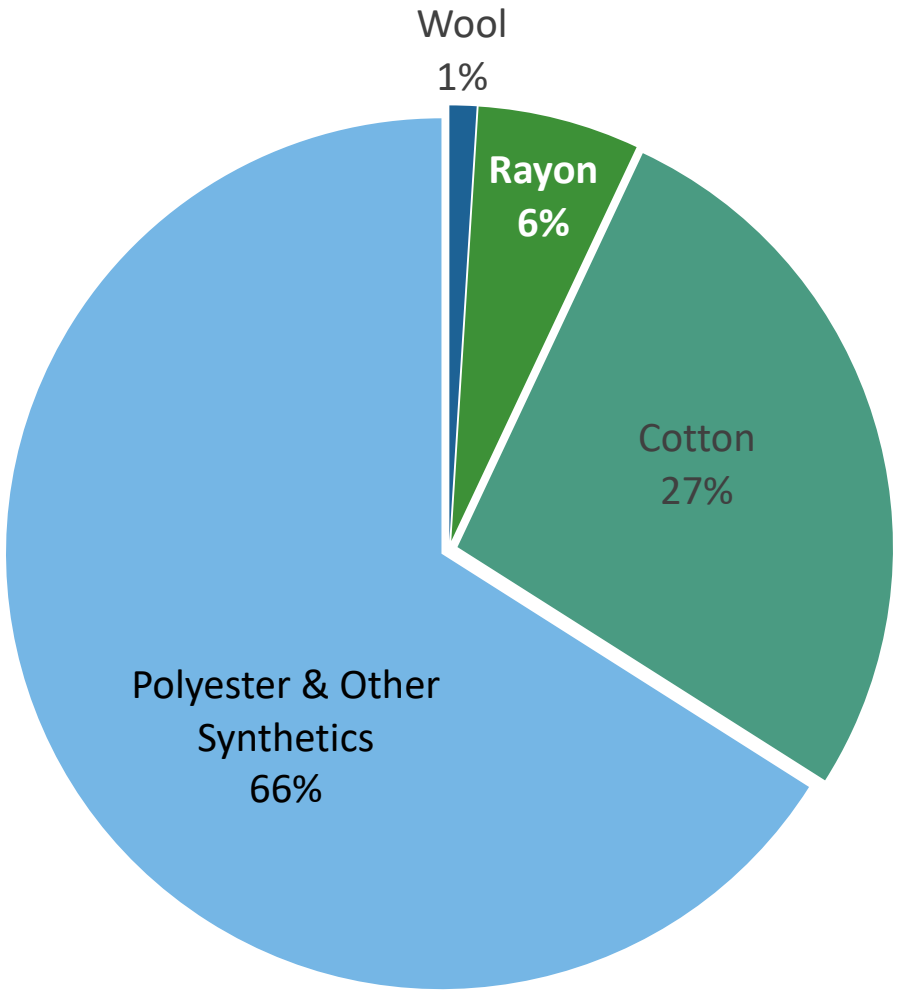
OUR BREAKTHROUGH RAYON PRODUCTS

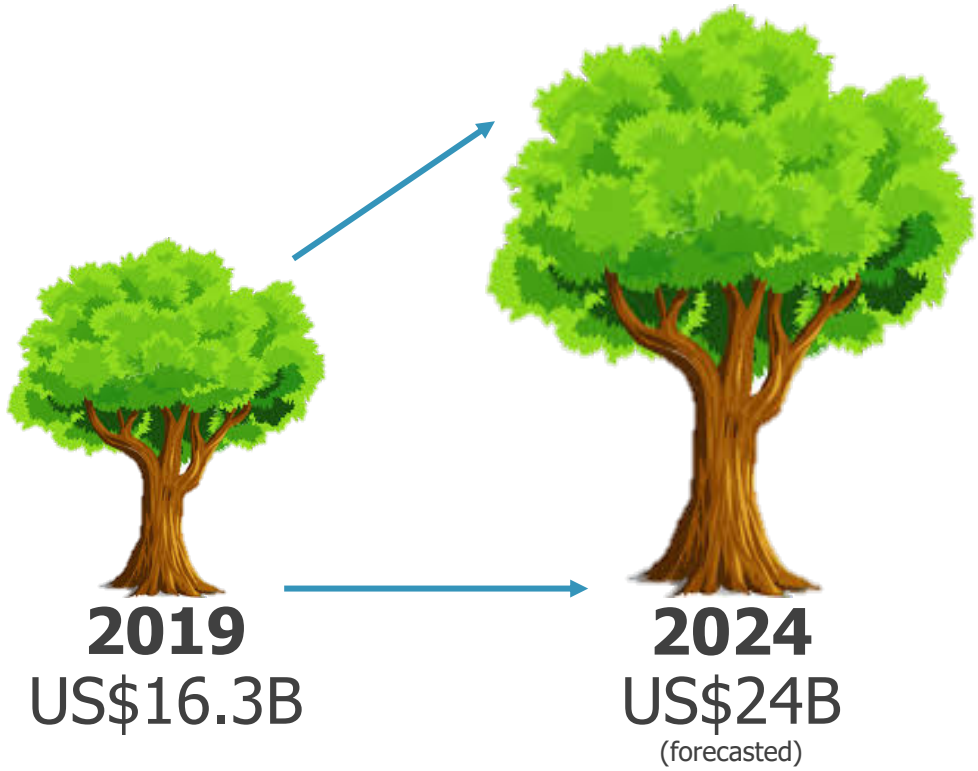
- Rayon is a well established fibre currently derived from trees
- It is a versatile fibre used in many applications including textiles, wipes, personal hygiene, tyres and teabags
- Nanollose has developed revolutionary TREE-FREE Rayon products trademarked nullarbor fibre.
- All nullarbor fibre products are 100% biodegradable
- Proven ability to withstand current industrial manufacturing
- Easily retrofitted into today's textile and clothing production processes

TREE-FREE NONWOVEN RAYON FIBRE & FABRIC

nufolium

RAYON MARKET GROWING BY 10% PA





ADVANTAGES OF OUR TREE-FREE RAYON

CURRENT RAYON FIBRE PROCESS

01

TREES CUT & CHIPPED

- Destruction of forests
- 12-18 year growth cycle

02

WOOD PULPING PROCESS

- Energy intensive
- Hazardous chemicals
- Waste & pollution

03

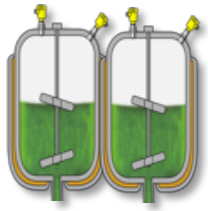
TREE-BASED CELLULOSE

04

RAYON FIBRE

Nullarbor can be produced using existing industry infrastructure so no need to invest in new equipment

NANOLLOSE RAYON FIBRE PROCESS



FERMENTATION OF WASTE

- Cellulose from waste
- Grow cycle of 8-10 days

'NOT REQUIRED'

Time and cost savings while protecting the environment

TREE-FREE CELLULOSE

nullarbor FIBRE

TREE-FREE RAYON FIBRE

WASTE REMEDIATION

NO DEFORESTATION
PULPING PROCESS
PESTICIDES

LOW USE OF ENERGY
USE OF WATER
USE OF LAND

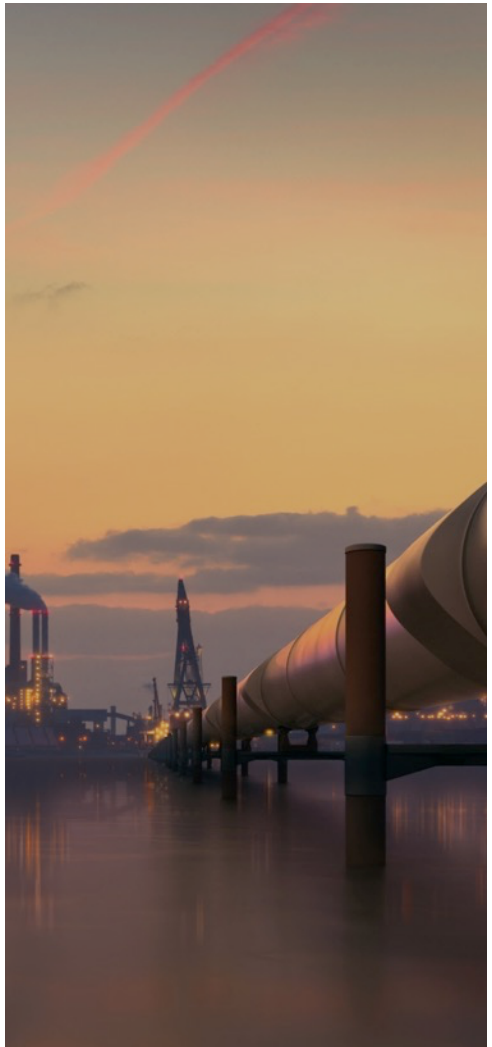
HIGH TRACEABILTY

TECHNOLOGY AND PROCESS VALIDATED

The first wearable garment using nullarbor™ fibre. Tree-Free Rayon was manufactured using standard industrial equipment, validating Nanollose's waste-to-clothing technology.

STRONG INTERNATIONAL INTEREST

- Brands, retailers and manufactures are urgently seeking sustainable alternatives to rayon and cotton
- Nanollose has had significant interest from major international clothing brands and super users of cellulose based fibres
- The company is currently in discussions with a number of these groups and is working towards manufacturing / collaboration agreements
- Cooperation Agreement signed with Codi Group for Nanollose's Tree-Free Rayon the wipes market



PATHWAY TO MARKET & DELIVERABLES IN 2019/20

SUPPLY
Develop the microbial cellulose (MC) supply chain

- Increase MC supply to 1-5 tons per month over the next 3-9 months
- Establish MC supply chains in 2-3 countries with relevant partners via binding agreements or JV's
- Create a commercial standard for textile applications along with a network of liquid waste providers

PROCESS
Refine Nanollose technologies

- Sign manufacturing collaboration/agreement with a recognised industrial fibre marker to assist in process optimisation and initial scale product offerings
- Develop new growing methods to accelerate supply and scale
- Create infrastructure for the harvesting and process of the raw material

DEMAND
Textile production & commercial partners

- Sign supply agreements with 2 to 4 well-known global clothing brands
- Establish inroads in new sectors where our microbial cellulose can be transformed into valuable products, e.g. personal hygiene and other nonwovens
- The wipes market already secured via Codi Group

FIBRE PRODUCTION
SCALE-UP UNDERWAY

DEVELOPMENTAL SUPPLY

- ½ Tonne of microbial cellulose currently in stock for development and pilot production
- Fibres used for research, validating waste-to-clothing process and samples

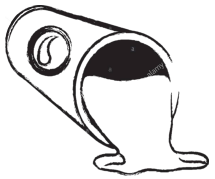
SMALL COMMERCIAL SUPPLY

- Advancing towards 1-5 tons of microbial cellulose per month from coconut waste in the near term
- Supply to be used in securing future manufacturing partners and high-end clothing brands

LARGE SCALE INDUSTRIAL SUPPLY

- Exploring other sources of liquid waste from food and beverages for large scale production
- Expected quantities suitable for engaging super users is 10+ tons per month

AS PRODUCTION INCREASES ADDITIONAL SOURCES OF SUPPLY WILL BE REQUIRED




nanollose
www.nanollose.com
N-CODE: 18122-1
Weight: 5kg
nanollose
www.nanollose.com
N-CODE: 18122-2
Weight: 5kg
nanollose

OUR NAME BRANDS.

nanollose
Short translation for **nano cellulose.**

nullarbor Latin words **nullus arbor**
Translation **No Trees.**
Market: **Textile industry**

nufolium Latin word **folium**
Translation is **leaf.**
We aspire to assist the turning over of a new leaf for our industry
Market: **Nonwoven industry**

newforest is vision towards the future.
The old forests have trees. Many are endangered.
The newforest has no trees.
Market: **Brand for Supply Chain development**

Tree-Free
Cellulose fibres currently come from trees.
Nanollose fibres **do not come from trees.**

INVESTMENT SUMMARY

PROVEN TECHNOLOGY
Waste-to-Garment process successfully validated

FIRST MOVER ADVANTAGE
World first TREE-FREE Rayon set to become an alternative to rayon and cotton

LARGE ADDRESSABLE MARKETS
US$16 billion rayon market with potential to take share from cotton and synthetics

STRONG GLOBAL DRIVERS
Brands, retailers and manufactures are urgently seeking sustainable alternatives

EXPERIENCED EXECUTIVE TEAM
Significant experience in R&D commercialization and textile supply chains