



nanollose™

**INVESTOR
PRESENTATION**

DECEMBER 2017



COMMERCIALISING
PLANT-FREE
CELLULOSE
TECHNOLOGIES



WHAT IS CELLULOSE?

Cellulose is the building block raw material found in items people use on a daily basis such as paper, clothing and hygiene products. Currently, cellulose is obtained from the following sources...



A **PLANT-BASED**
RAW MATERIAL



COTTON

Cotton fiber is 90% Cellulose



WOOD

Wood contains 40–50% cellulose



BAMBOO

A MICROBIAL-BASED
PLANT-FREE
RAW MATERIAL



WHAT INDUSTRIES USE IT?

Cellulose is produced globally and is the main ingredient of textiles and apparel made from cotton and other plant fibers. It is also the main component of paper and has applications across multiple global industries.

We are initially focusing on Textiles
US\$500b industry...



TEXTILES &
APPAREL



HYGIENE



FOOD



HORTICULTURE



PAPER, PLASTICS
& POLYMERS



MEDICAL

TODAYS ISSUES

Cellulose fibres are currently derived from environmentally damaging cotton and wood sources, which then go into making textiles and apparel.

COTTON

8 months to grow



33 million tonnes annually



8,000L water to make 1 pair jeans

WOODPULP

18 years to grow

REGENERATED



40% of all industrial wood harvest



Toxic Process

PETROLEUM

180 million years to form



70b barrels PA to make synthetic fabrics



Toxic Process

INDUSTRY SEEKING SUSTAINABLE FIBRES

Current fibre methods are **environmentally unsustainable**

Cotton is receiving more press about being the **world's dirtiest crop**

Headlines around the environmental impact are increasing

Brands, retailers and manufacturers are seeking sustainable alternative fibre resources from the current norm

Textile and apparel manufactures have had **limited alternative eco-friendly** options available to date...



NANOLLOSE

A SUSTAINABLE ALTERNATIVE

Developing innovative **PLANT-FREE Cellulose** fibre technologies

Eco-friendly fermentation process to grow cellulose fibres

Potential to provide an alternative to cotton and wood fibres

Accelerating development to show Nanollose fibres can be used **in the same way as others** to make clothing and textiles

Recent global fibre breakthrough achieved

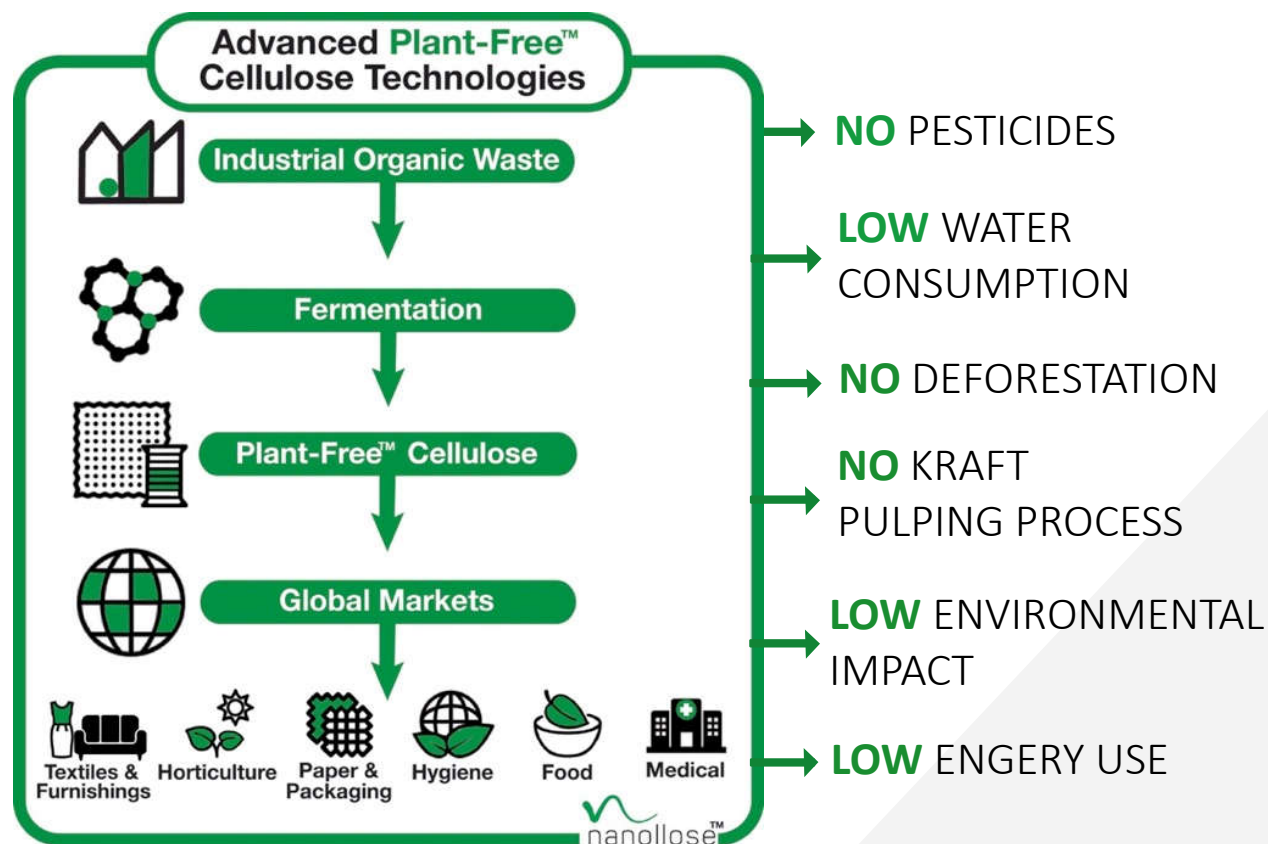


OUR PROCESS

Acetobactor xylinum, a non-hazardous bacteria, converts biomass waste products from the beer, wine and liquid food industries into **PLANT-FREE Cellulose** fibres

Environmentally sustainable alternative to plant-based natural fibres and petroleum based synthetic fibres

Technology is simple and **highly scalable**, allowing for fast scale-up and operation



FASTER GROW CYCLE

NANOLLOSE FIBRES

18 Days

COTTON FIBRES

8 Months

TREE FIBRES

18 Years

OIL FIBRES

180 Million Years



SOURCING CELLULOSE

COCONUT BY-PRODUCTS (IMMEDIATE SUPPLY)

Nanollose plans to tap into the established Coconut industry to secure pilot-scale supply of Plant-Free cellulose, which will then be processed into valuable fibres for industry. A variety of coconut by-products can be synthesized into microbial cellulose.



+ *Advanced discussions underway with suppliers*

ORGANIC WASTE (LARGE SCALE)

Nanollose also intends to explore & develop other sources of liquid organic waste (beer, wine, sugar) as a feed stock for Acetobacter to create Plant-Free Cellulose.

FIRST COMMERCIAL FIBRE OPPORTUNITY

Nanollose has developed a revolutionary **PLANT-FREE Cellulose Rayon Fibre**

Rayon is a well established fibre currently made from cellulose derived from trees

High growth market valued at US\$10B in 2014, **growing to US\$16.3B in 2019**

Rayon is used to make everything from home furnishings to clothing

Significant environmental concerns with current Rayon production



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NANOLLOSE RAYON FIBRE



Nanollose's revolutionary Plant-Free viscose-rayon fibre with potential applications across global rayon markets

Significant global breakthrough for the multi-billion dollar textile and clothing industries

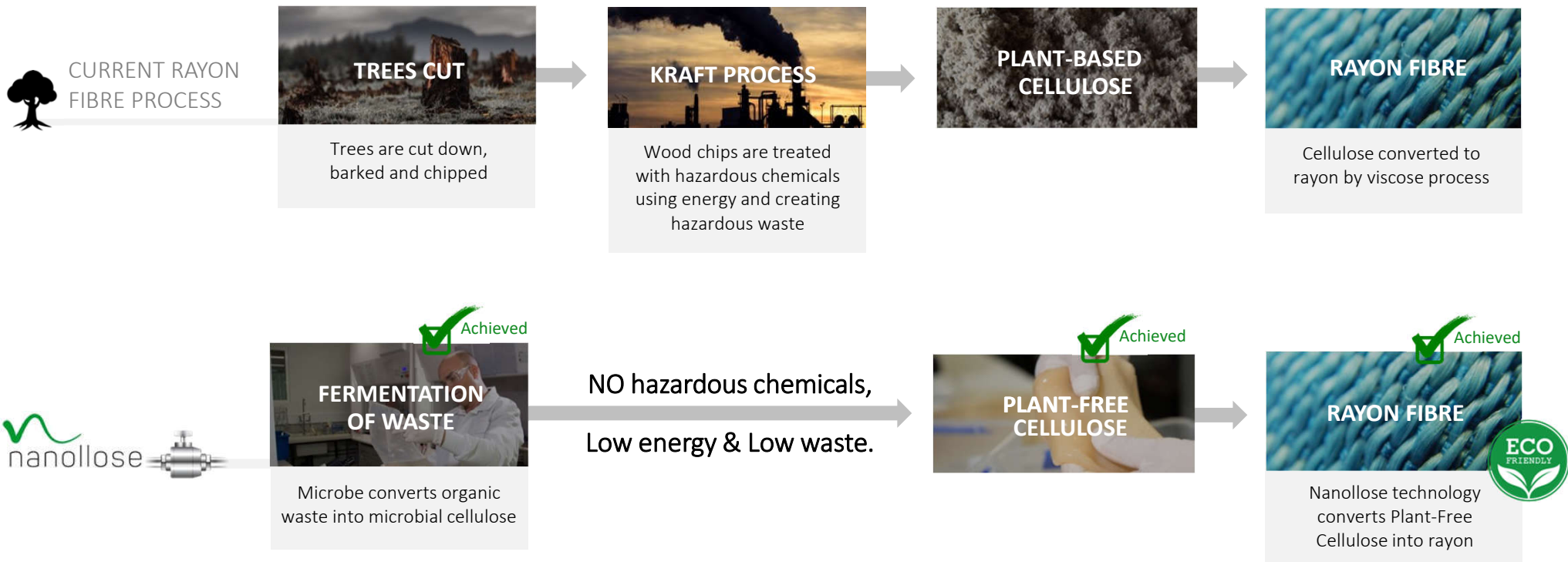
Nanollose believes there is **no other eco-friendly PLANT-FREE** Rayon fibre available to textile and clothing manufacturers

Nanollose is a **first mover** in offering a sustainable **PLANT-FREE** Rayon alternative

Validates the Nanollose technology can convert **PLANT-FREE** microbial cellulose into a valued commercial fibre product

Provisional patent application has been filed to protect intellectual property of breakthrough

OUR SUSTAINABLE RAYON PROCESS



PATHWAY TO MARKET

Commercial partners will take and accelerate the Nanollose technology to global markets

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Revolutionary sustainable fibre alternative

ROYALTIES
LICENSING DEALS

TEXTILE OR APPAREL PARTNER

- + Industry partners to **license Nanollose technology**
- + No major retro-fitting of machinery and processing
- + Simple process to **replace current fibres**
- + Enormous sustainable PR opportunity for partners
- + **Early stage discussions underway**



FUTURE MARKETS

While textiles and apparel are the key focus, there is significant opportunity for our **PLANT-FREE Cellulose** to be an sustainable alternative to the current cellulose offerings from environmentally damaging sources.

MEDICAL PRODUCTS



Natural nano-structures makes it ideal for the regenerative tissue medical field (large surface area)

Non-pyrogenic (no cell rejection)

PERSONAL HYGIENE



Natural absorbent properties

Ideal for pads & nappies

100% biodegradable alternative

SEED GERMINATION



Soilless opportunities

High water retention capacity

PAPER, PLASTICS & POLYMERS

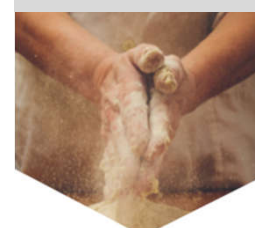


High strength

Natural adhesive bonding qualities

Global production of paper and cardboard is 406.5 million metric tonnes in 2014

FOOD



High in fibre, natural bulking agent

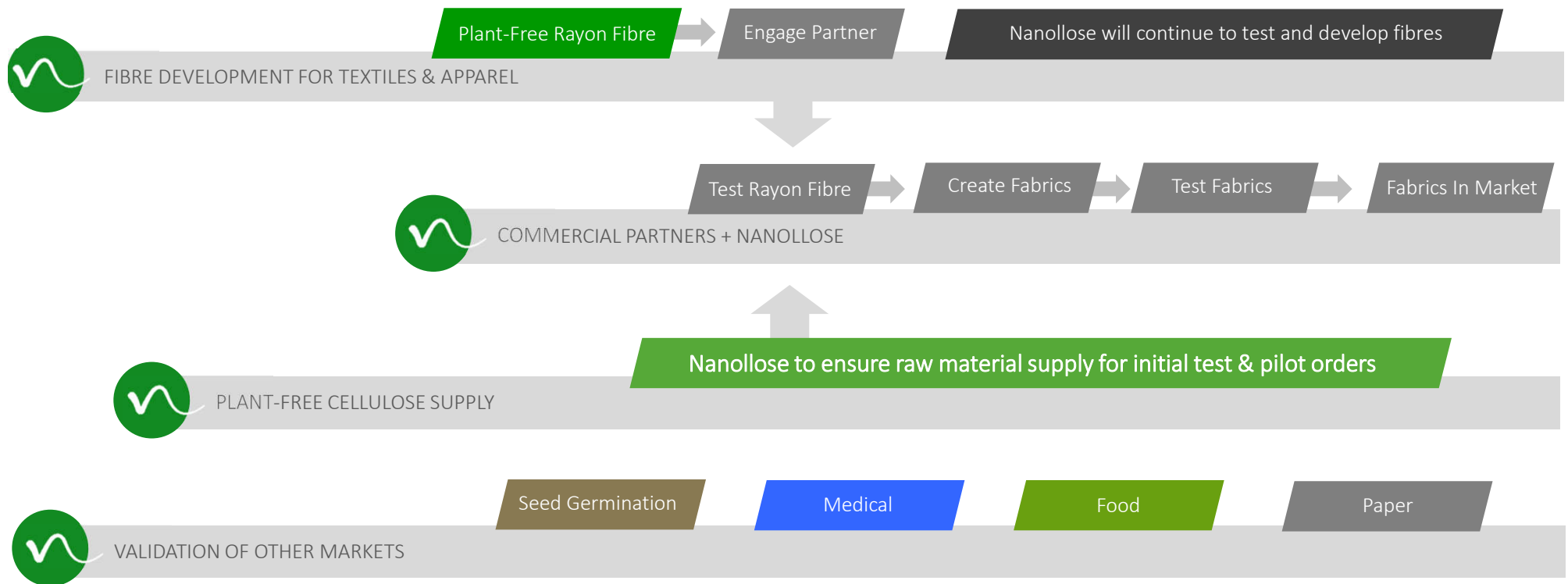
Gluten free

Low fat substitute

Increased acceptance & applications across the food industry

UPCOMING MILESTONES

Significant news flow expected over the next 8-12 months



TEAM



Founder

DR WAYNE BEST
NON-EXEC CHAIRMAN

- ▶ 35 Years experience in organic chemistry & biotechnology sector
- ▶ 10 years at the Chemistry Centre (WA) and was responsible for the formation and running the Medical & Biological Chemistry section
- ▶ Founded Epichem Pty Ltd in 2003, a contract research company, where he is still the Managing Director

TERRY WALSH
NON-EXEC DIRECTOR



ALFIE GERMANO
MANAGING DIRECTOR

- ▶ 30 years in the global textile industry sector
- ▶ 24 years in the Hong Kong garment industry as a leader of a large scale global product development, sourcing and retail operations
- ▶ Held VP and Director positions at GAP Inc, VF Corporation, Liz Claiborne Inc, Fila Inc and Carter's Inc



Founder

GARY CASS
NON-EXEC DIRECTOR

- ▶ Made the world's first garment from the bacterial fermentation of wine in 2006
- ▶ 25 years of experience across a wide range of biological sciences
- ▶ Published in numerous international arts and science projects

WINTON WILLESEE
NON-EXEC DIRECTOR

CAPITAL STRUCTURE

CAPITAL STRUCTURE

Total Shares on Issue	74.9m
Cash raised at IPO (October 2017)	\$5m
Market-cap (\$0.20)	14.9m



Nanollose secured \$5m through IPO and listed on ASX in October 2017

High % of company shares escrowed for 24 months – 40 million in total

Tight free float with Top 20 holding 65%

Upcoming entitlement offer rewarding any shareholders with 1 cent options on a 1 for 4 basis approximately 3 to 6 months after listing

THANK YOU



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