



nanollose

COMPANY UPDATE PRESENTATION

JULY 2018



ASX NC6

MILESTONES & ACHIEVEMENTS

<https://www.youtube.com/watch?v=gfVPgMJY5vo>



Fermented Fashion



The beer dress



Key patents filed
& MD appointed



World first fibre
break through



Nanollose is born



\$5M Raise + ASX Listing



World first fabric launched
at global textile event



INVESTMENT HIGHLIGHTS

PROVEN TECHNOLOGY:

Unique scalable process which transforms **PLANT FREE microbial cellulose** into eco-friendly fibres for textiles and other industrial applications

HIGHLY DIFFERENTIATED PRODUCT:

World first Plant-Free Rayon fibre set to become an alternative to rayon and cotton fibres

LARGE ADDRESSABLE MARKETS:

Initially targeting the US\$500 billion textile industry with immediate focus on the **US\$16 billion rayon market**. R&D program underway to penetrate additional markets

STRONG INTERNATIONAL DRIVERS:

Brands, retailers and manufactures are **urgently seeking sustainable alternatives** to rayon and cotton fibers, both of which cause significant environmental issues

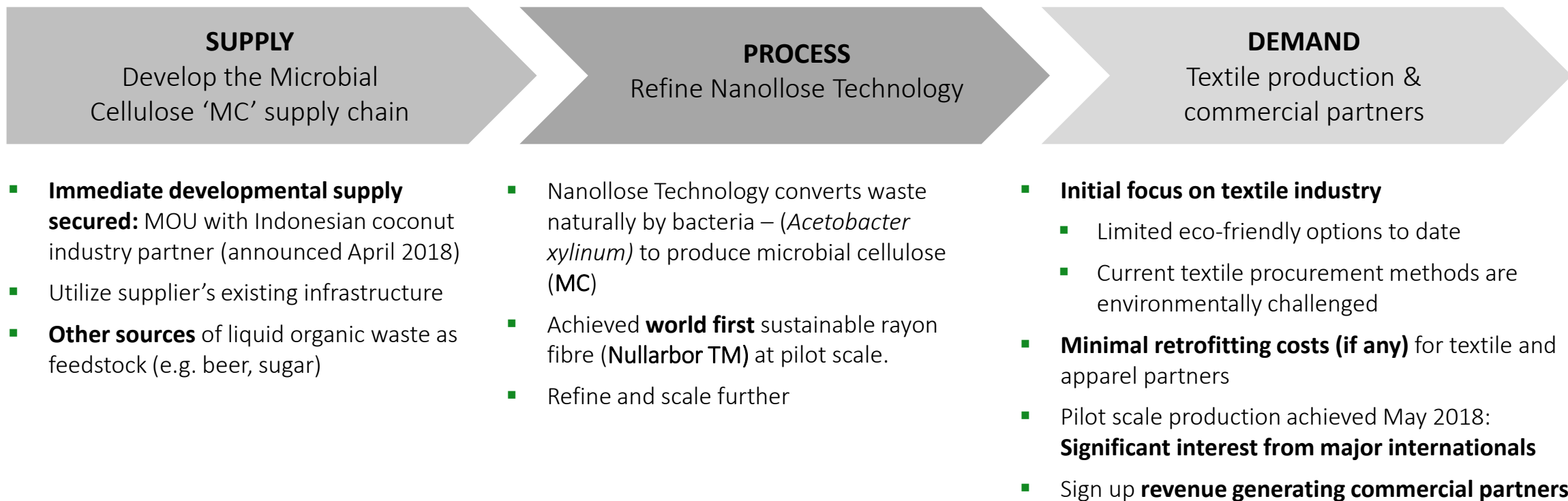
COMPETITIVE ADVANTAGE:

No trees or plants are impacted no further chemical production needed for Nanollose fibres. **Easily retrofitted into current textile and clothing production methods**

EXPERIENCED TEAM:

Managing Director Alfie Germano has over **30 years experience** in large scale textile product development, and has held VP and director positions at GAP Inc, VF Corporation, & Liz Claiborne.

COMPANY STRATEGY



COCONUT
BY-PRODUCTS



ACETOBACTER
XYLINUM



PLANT-FREE
CELLULOSE



WHAT IS CELLULOSE?

Cellulose is one of the most common raw material building blocks



Cellulose is currently **plant-based**



WOOD



BAMBOO



COTTON

Current Rayon fibres

- Well established fibre made from cellulose **derived from trees**
- Rayon is **used to make everything** from clothing to tyres
- High growth market valued at **US\$10b in 2014** growing to US\$16.3b in 2019/20
- Significant **environmental concerns**
- Consumers and industry are **demanding alternatives**



nanollose

is **plant-free** cellulose



nanollose
TREE-FREE
TECHNOLOGIES



nanollose
PLANT-FREE
TECHNOLOGIES

Nanollose fibres

- Uses liquid waste to create microbial cellulose (MC)
- Unique technology converts MC into **eco-friendly fibres**
- World first sustainable and plant-free cellulose rayon fibre (Nullarbor TM) achieved
 - Initially targeting the **US\$500bn textile industry**
 - Other industries: Hygiene, food, horticulture, paper, plastics & polymers, medical

TEXTILE MARKET DYNAMICS

Consumers and the industry are seeking, demanding **feasible & sustainable, long-term alternatives**

adidas

JAN 11, 2018

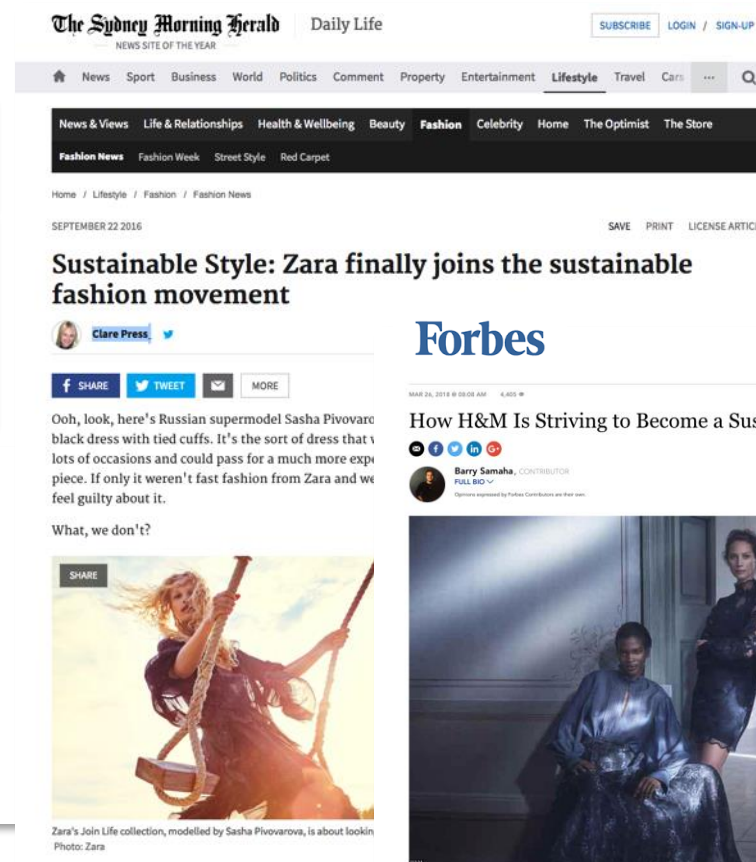
Fashion for Good and adidas partner to accelerate and scale sustainable innovation in the apparel industry

THE H&M GROUP RELEASES NEW GOALS IN SUSTAINABILITY REPORT 2016

The H&M group Sustainability Report 2016 is published today, outlining several new goals including a commitment to use 100% recycled or other sustainably sourced materials by 2030 and to become climate positive throughout its entire value chain by 2040.

4 APR, 2017

Millennials are making it luxe to be more **ethical and environmentally aware.**
They're on pace to hit 45% of total spend by 2025.



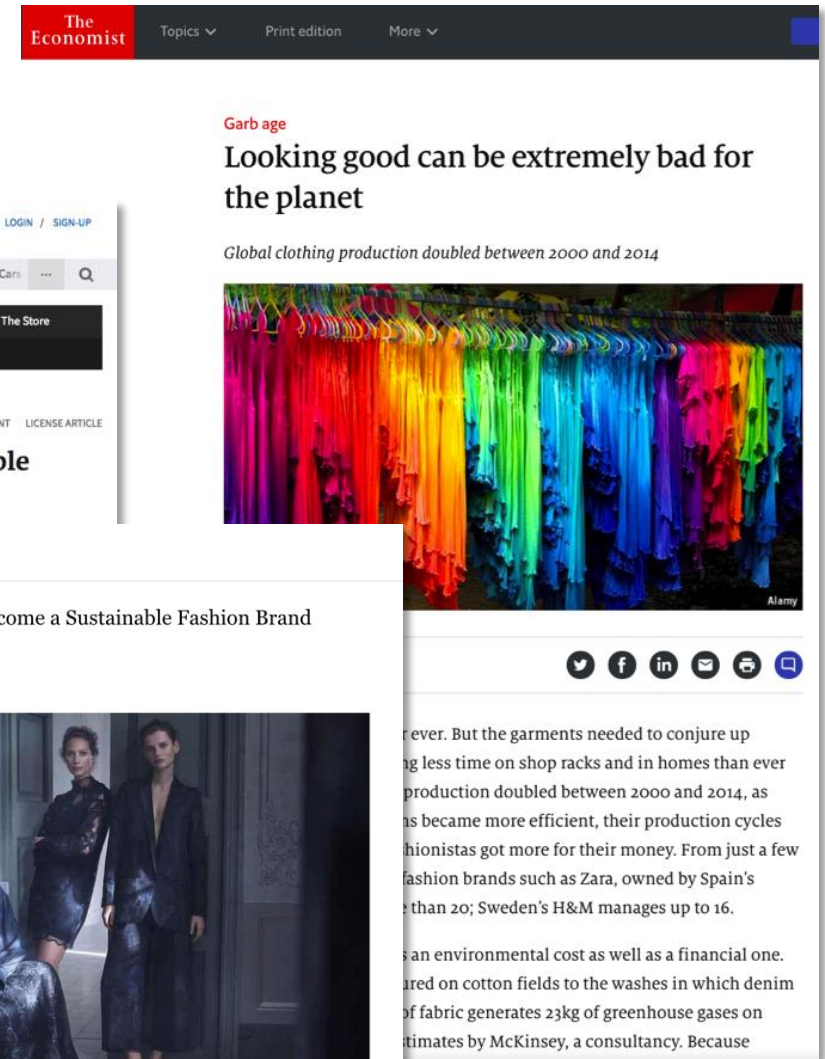
Forbes

How H&M Is Striving to Become a Sustainable Fashion Brand

Barry Samaha, CONTRIBUTOR
FULL BIO



As one of the most visible fashion retailers in the world, with vast resources at its disposal, the H&M Group (H&M, COS, & Other Stories, Weekday and Monki) has the capability to truly sway commerce. The Swedish firm, which was founded in 1947, grew immensely in the '90s by offering runway-ready pieces at bargain price points, altering how clothes were purchased by the masses. Indeed, along with Inditex (which owns Zara), Gap Inc. and others, the H&M Group—particularly H&M—made looking stylish accessible to those couldn't afford the astronomical sums presented by designer labels.



GROW CYCLE AND ISSUES

[tps://www.youtube.com/watch?v=BiVdOspI9PE](https://www.youtube.com/watch?v=BiVdOspI9PE)

PETROLEUM

180 million years to form

COTTON

8 months to grow

WOODPULP

18 years to grow

NANOLLOSE FIBRES

18 Days



POLLUTION

70b barrels PA to make synthetic fabrics

PESTICIDES

33 million tonnes annually

DEFORESTATION

40% of all industrial wood harvest

ENERGY INTENSIVE

Toxic process

WATER CONSUMPTION

8,000L water to make 1 pair of jeans

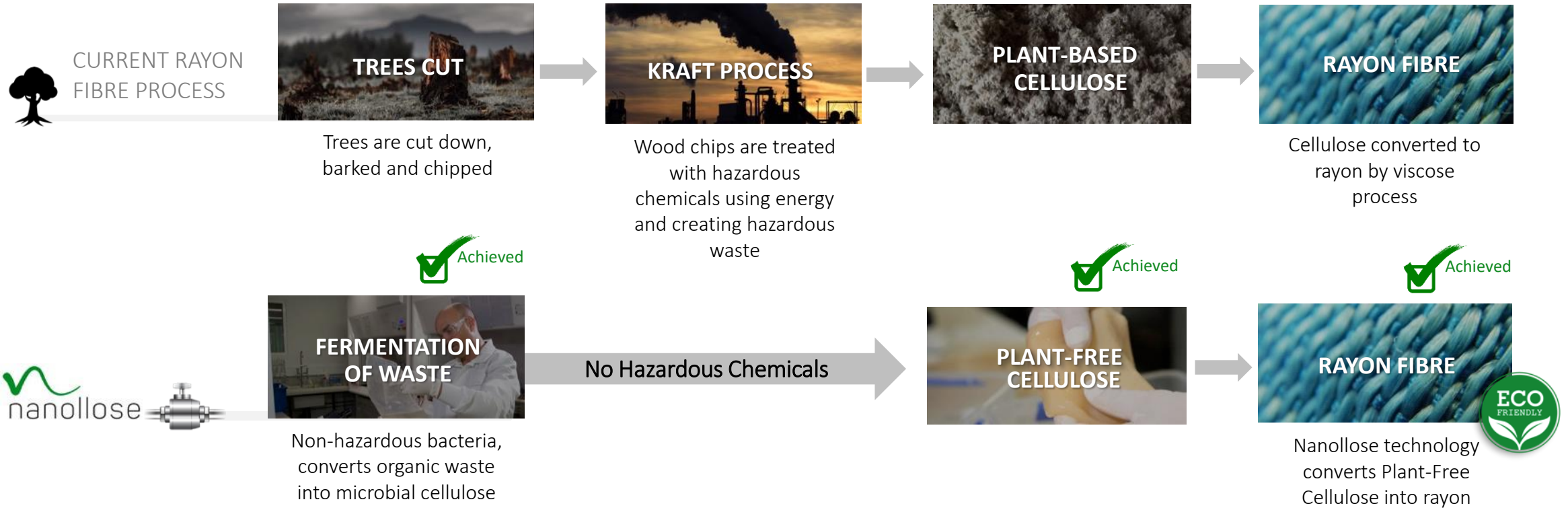
PULPING PROCESS

Toxic process

- + FASTER GROW CYCLE
- + SUSTAINABLE
- + WASTE REMEDIATION AND REPURPOSING

<https://www.youtube.com/watch?v=P3bXclXWOTw>

RAYON PROCESS COMPARISON



Nanollose advantages

NO DEFORESTATION

NO PESTICIDES

NO KRAFT PULPING PROCESS

LOW WATER CONSUMPTION

LOW ENERGY USE

LOW USE OF LAND

THE NANOLLOSE PROCESS

Actual product produced in an industrial setting



1 Fermentation with *acetobacter xylinum* to produce MC



3 Raw MC



4 Converting MC into fibres



5 MC fibres



6 Spinning process using standard industrial equipment

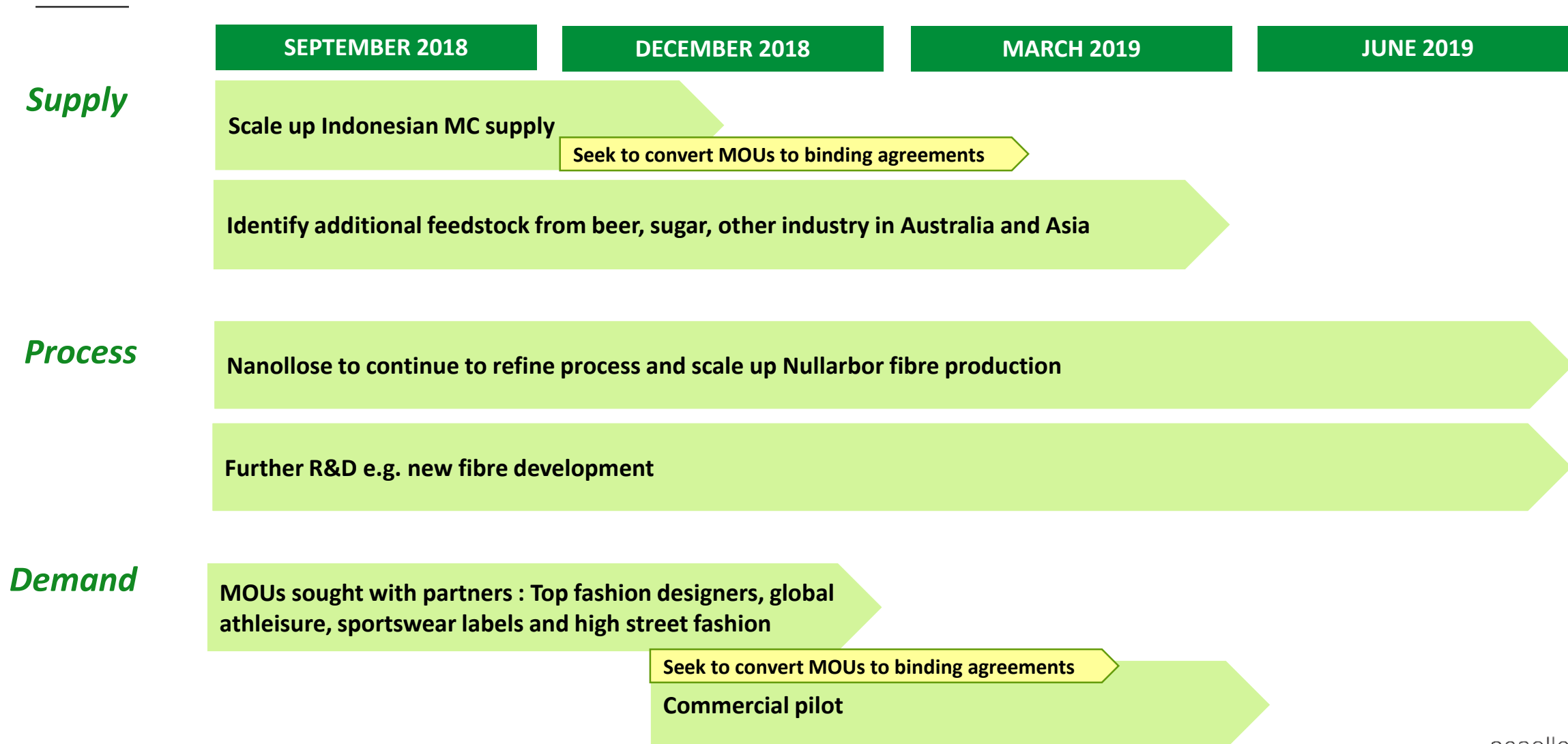


7 World first plant-free viscose rayon fibre: Launched at Planet Textile Summit in Vancouver



8 Fabric created

NEAR-TERM MILESTONES



LONGER TERM STRATEGY

- Assist in the procurement of MC feedstock
- Refine-Produce Nullarbor fibre with industry partners
- Commercial agreements
 - Use of fibre (licensing)
 - Textiles and fabric production
- Revenue opportunity to remove, reduce and reuse waste
- Other industries



HYGIENE



FOOD



HORTICULTURE



PAPER, PLASTICS & POLYMERS



MEDICAL

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