
# re:newcell

## *Textile Recycling*

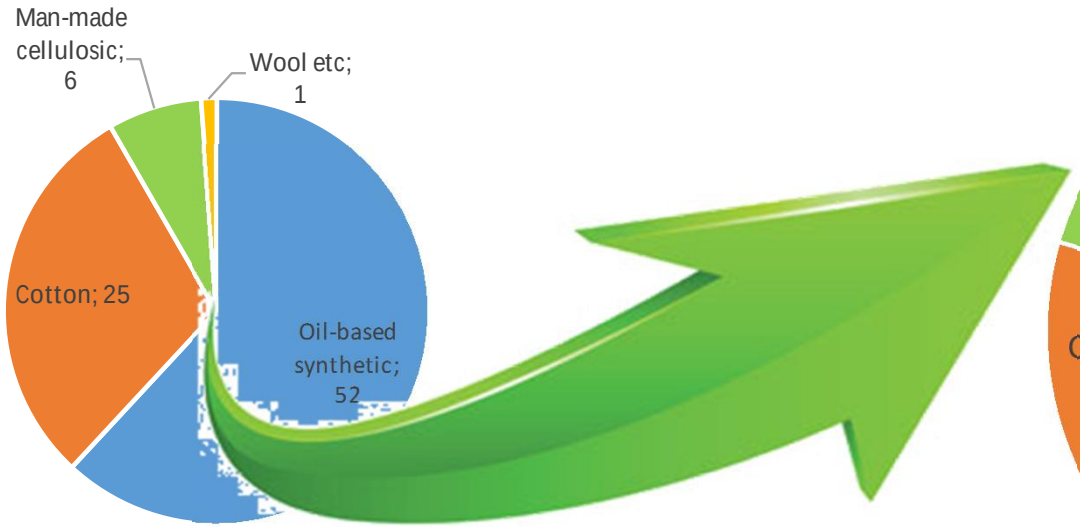
## *- Closing the Loop on Cotton -*

# The Textile Market tomorrow...

re:newcell

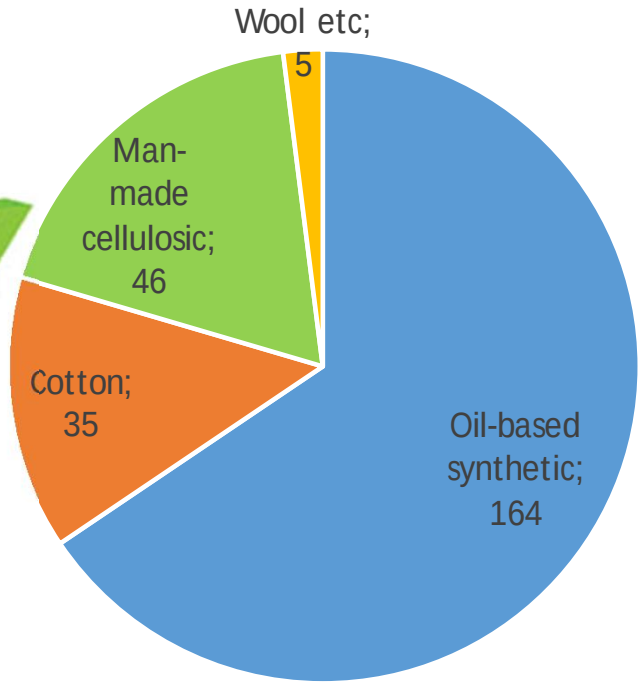
World Fibre Market 2015

90 million tons




World Fibre Market 2050

250 million tons




2050 is one scenario assuming a 6% annual growth of man-made cellulosic and that cotton grows to 35 Mton/year.

# Market testimonials

re:newcell

*"We need the industry to work with us to use more …**cellulose-based and recycled fibres**. … By 2020, we want to … **triple our cellulose-based fibres**. It is a very clear move for us to work towards a more circular economy."*

*Clara Guasch, raw materials specialist at **IKEA**, October 2015*

# Closed-loop Recycling

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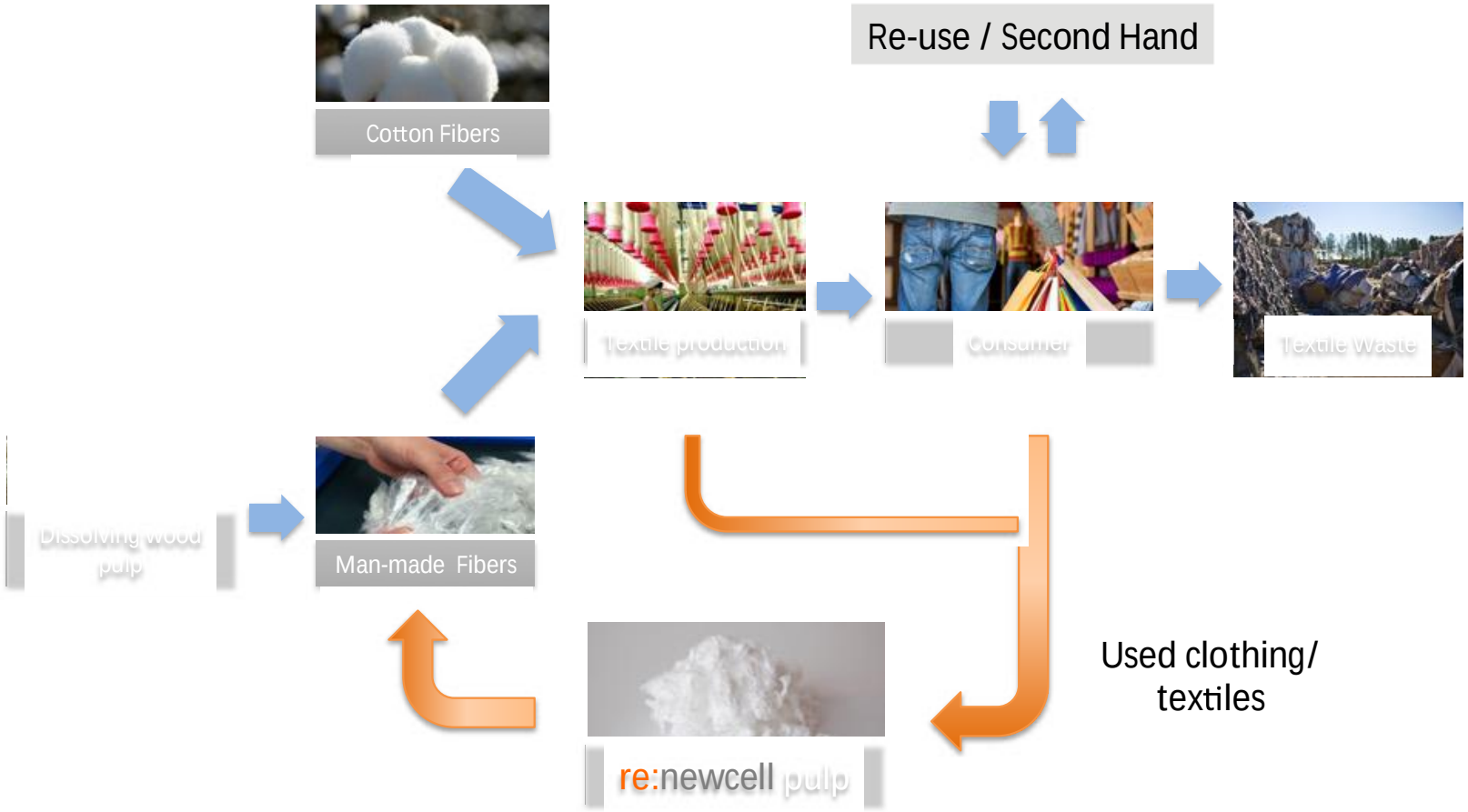


# Market testimonials

re:newcell

*"The ambition is to up-cycle and use technology to **restore the quality of the materials** after they've been consumed or used to the same quality level or as close as possible to virgin materials, then the materials will be continuously recyclable.*

*"The technology needed to upcycle right now is expensive, and there are **a few initiatives under development to make it a process that's more accessible to the many people** and that can be deployed successfully. We can't send everything to a landfill because there is an end of life – it doesn't make any sense. This is the future, and it's something we need to do for the planet."*

*Clara Guasch, raw materials specialist at **IKEA**, October 2015*

# Key Personnel

re:newcell

## Board of Directors

Malcolm Norlin – Chairman

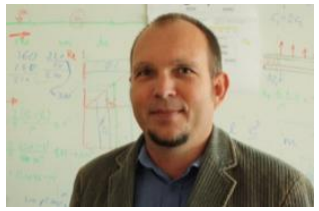
Professor Mikael Lindström

Henrik Norlin

## Key staff

Professor Gunnar Henriksson

Christofer Lindgren, PhD



Per Olofsson, M.Sc.

## Key staff

Lennart Börjesson

Lennart Källén

Louise Norlin, M.A.

# Novel Technology for man-made Fibre

re:newcell

Recycling of cotton into dissolving pulp which is spun into a fibre of high quality.

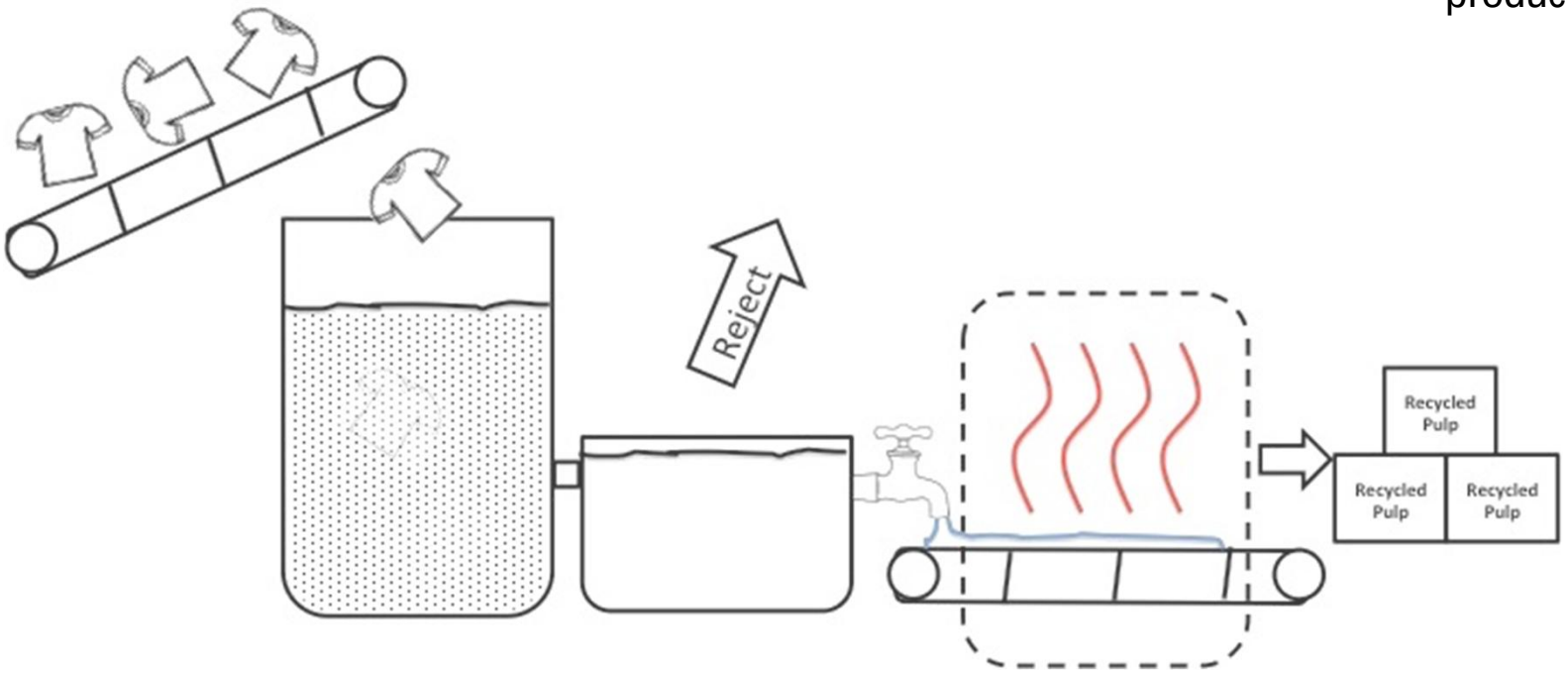
- Efficient and cost competitive
- Easily implemented into existing pulp plant manufacturing
- No changes needed in the textile manufacturing value chain
- The Quality of the re:newcell fibre meets the Fashion industry's requirements.

re:newcell Pulp

# The Process

re:newcell

1. Textiles with high cellulosic content are sourced from the market.
2. The textiles are shredded, de-coloured and dissolved in re:newcell's process.
3. Non-cellulosics and other contaminants are separated from the cellulosic slurry.
4. The slurry is dried to a pulp, packaged into bales and supplied into the textile production chain.



# Proof of Concept

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# Market testimonials

re:newcell

*”We are proud of our jersey Front Runners, which are made of 100% Tencel, a fully renewable cellulose-based material derived from wood fibres.* ***Thanks to the company Re:newcell****, which has* ***developed a unique technology*** *for converting old cotton, Tencel, and other cellulosic textiles into a viscose yarn, we will be able to recycle our Front Runners into new cellulosic (viscose) fibres at their end-of-life.”*

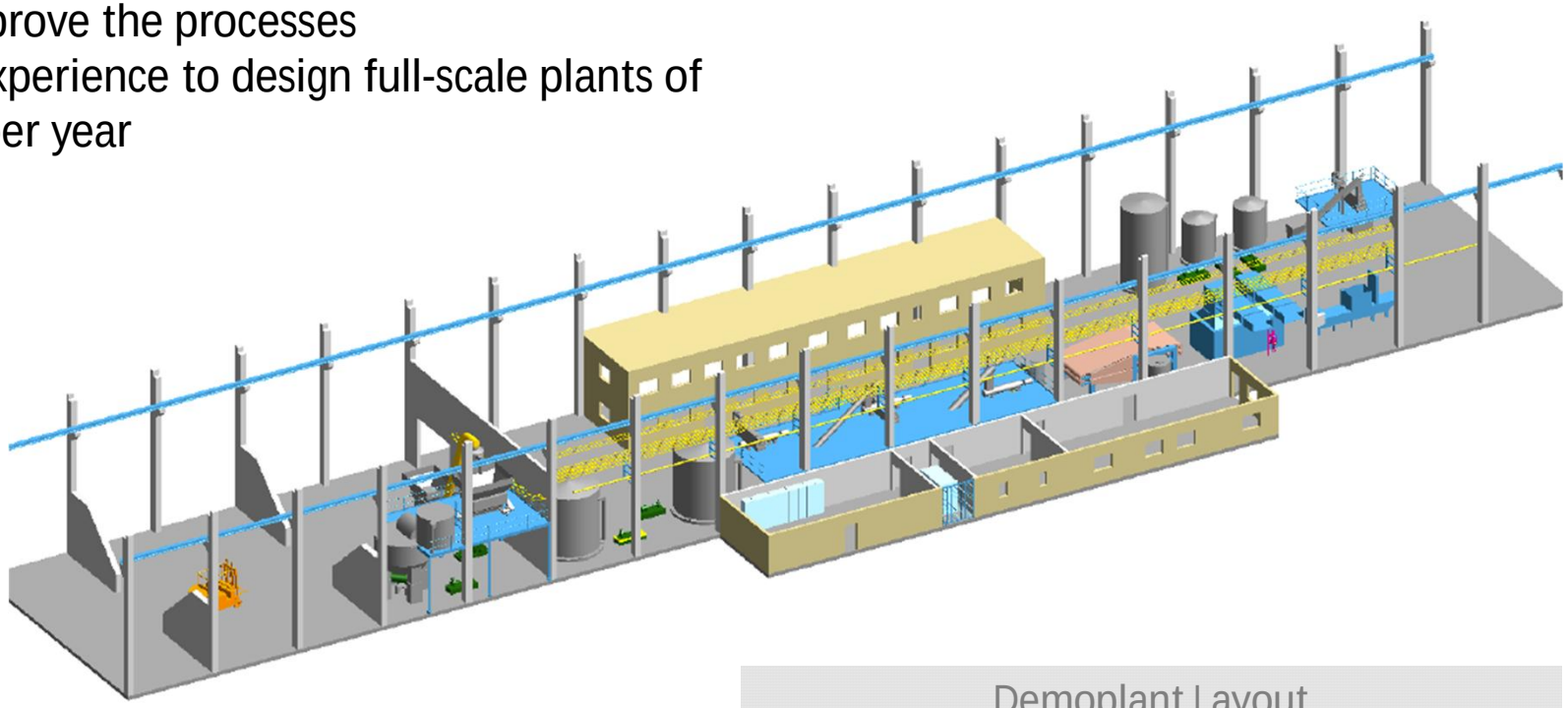
*Filippa K sustainability report (www.filippa-k.com)*

# Demonstration plant

re:newcell

7,000 tonne demo plant completed by end 2016

- Verify the processes on a larger scale
- Optimize and improve the processes
- Obtain enough experience to design full-scale plants of ~30,000 tonnes per year



Demoplant Layout

# Go to Market Strategy

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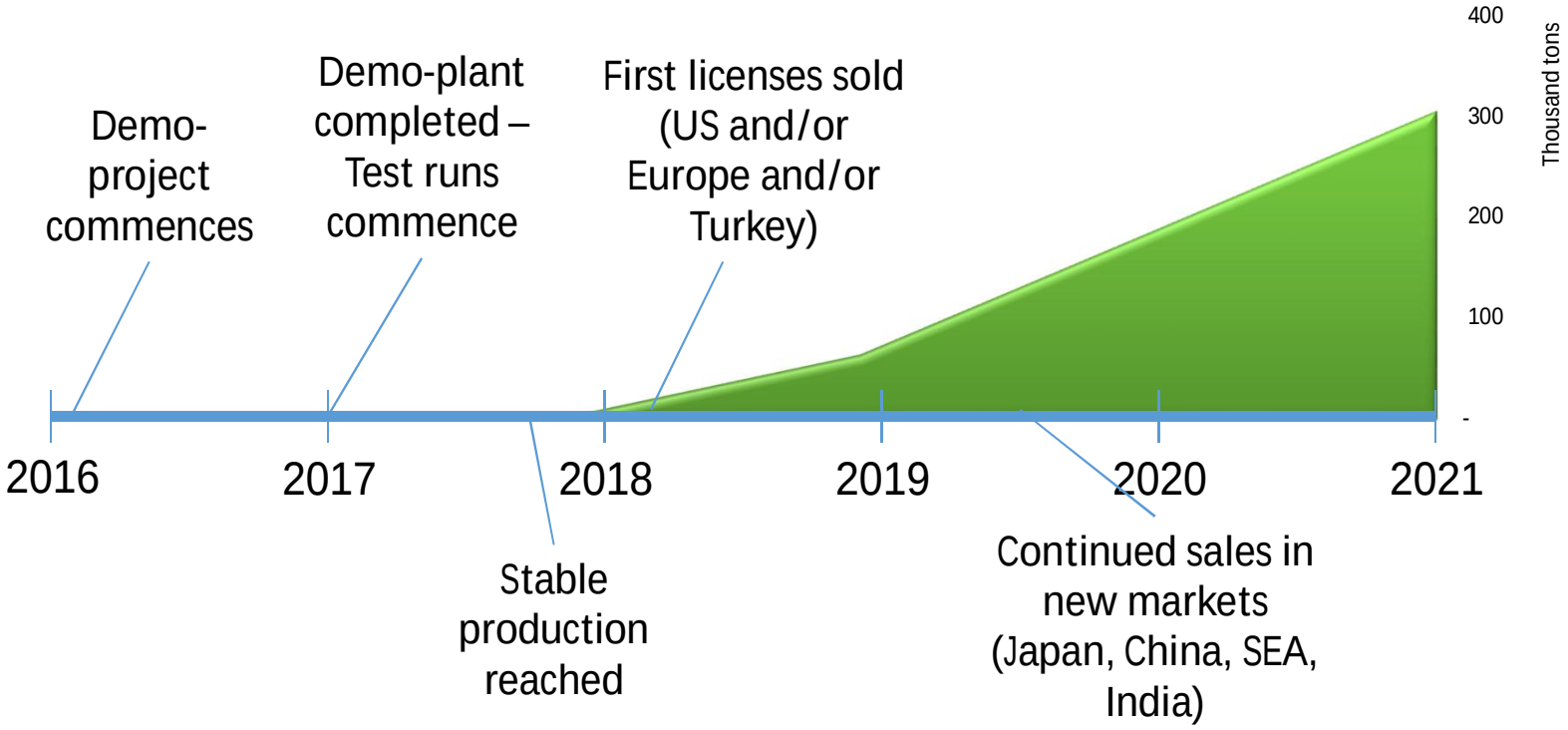

# Market position

re:newcell

G-STAR RAW

Filippa K

patagonia

Nudie Jeans co

H&M

IKEA

Re:newcell has established a dialogue with:

- major retailers (see logos above)
- viscose/lyocell producers and
- suppliers of cotton clippings.

Success Factors for re:newcell:

- Market Demand today and in the future
- A strong and competent team
- Competitive with existing products already on the market you are entering – this includes quality and price
- Try and try again!
- Have a clear plan going forward

# Contact Details

re:newcell

T-shirt produced from re:newcell pulp

For any questions please contact

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