

Grøn vækst og nye arbejdspladser i  
landdistrikterne, der hvor biomassen findes

# Potentiale i udnyttelse af lokal biomasse til tekstil-fremstilling

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VÆKSTCENTER  
GULDBORGSUND

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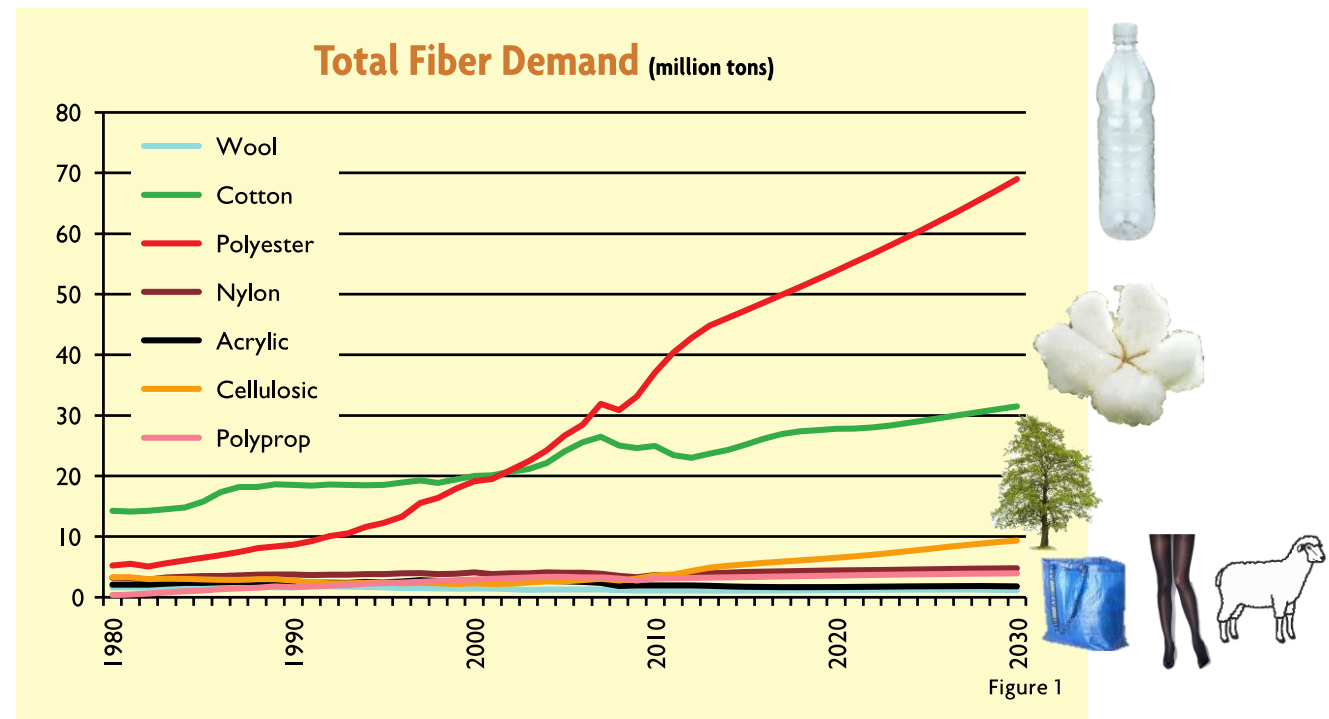


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# Global tekstil produktion

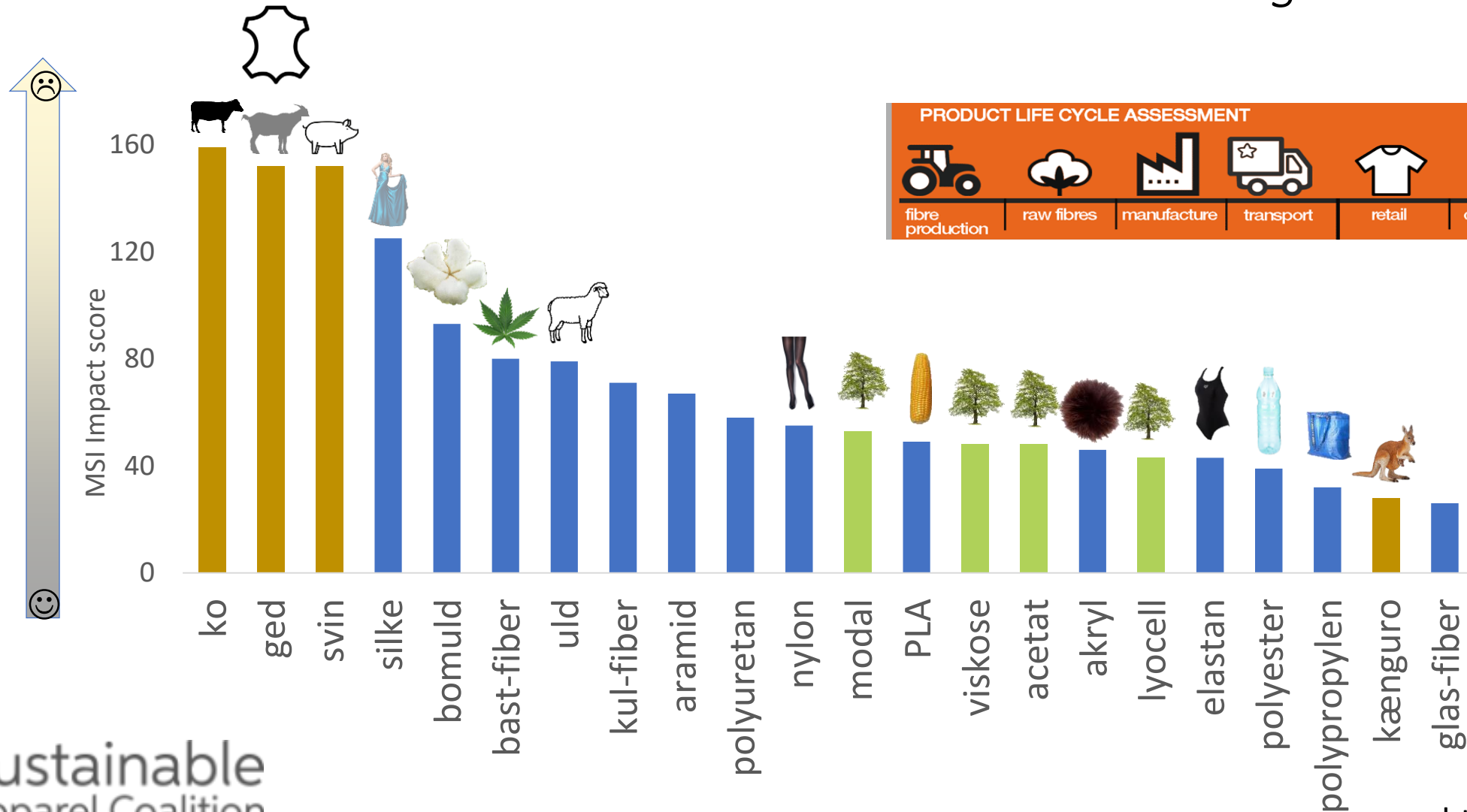
- Årligt: 100 millioner tons om året
- Over halvdelen er polyester. Stigende
- 27% bomuld. Stagnerende
- Ressource-krævende



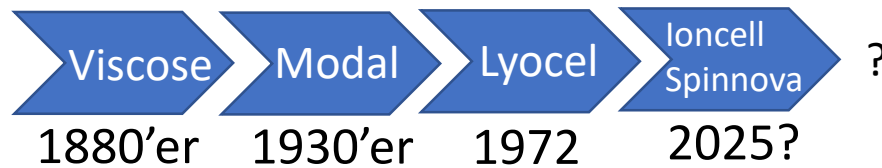


# Miljøbelastning – tekstilproduktion

*cradle-to-gate*

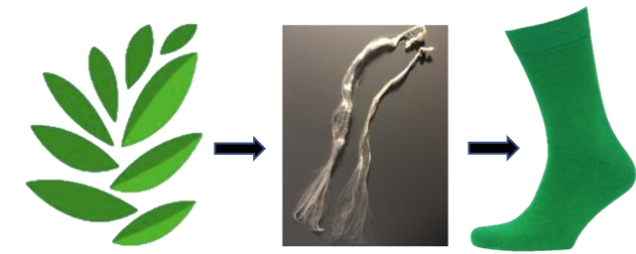


# Fremstillede cellulose fibre



# Fremstillede cellulose fibre

## *Non-wood* biomasse



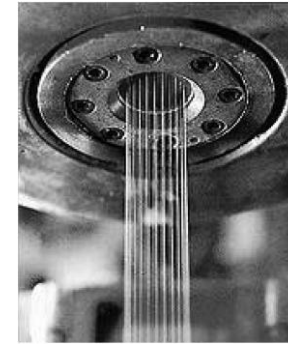
Non-wood  
biomasse



Græs protein



Cellulose pulp

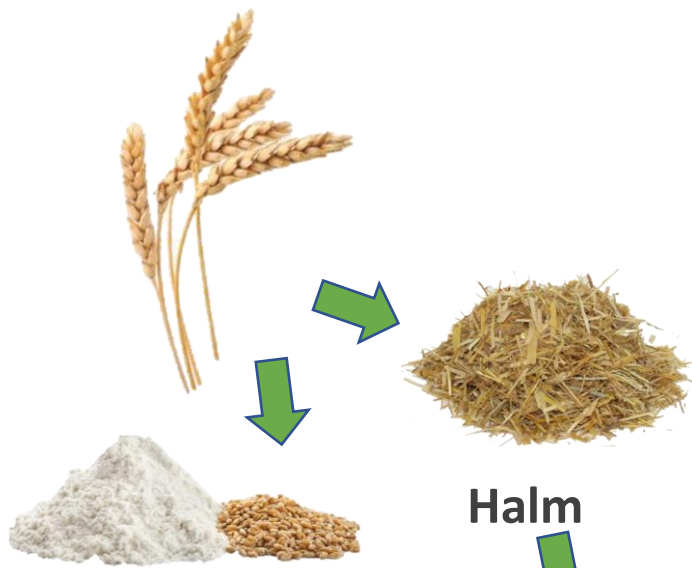




**Non-wood  
biomasse**



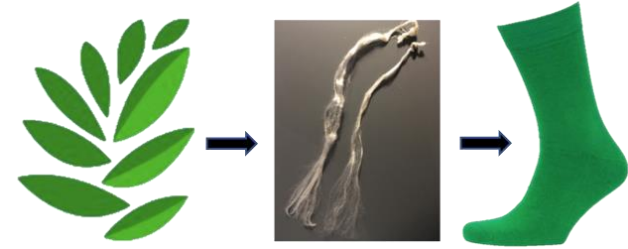
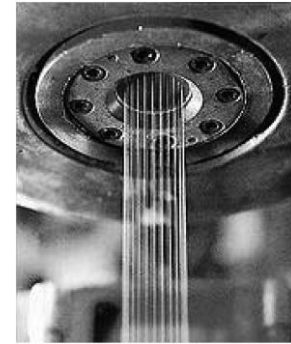
**Græs protein**



**Halm**



**Cellulose pulp**

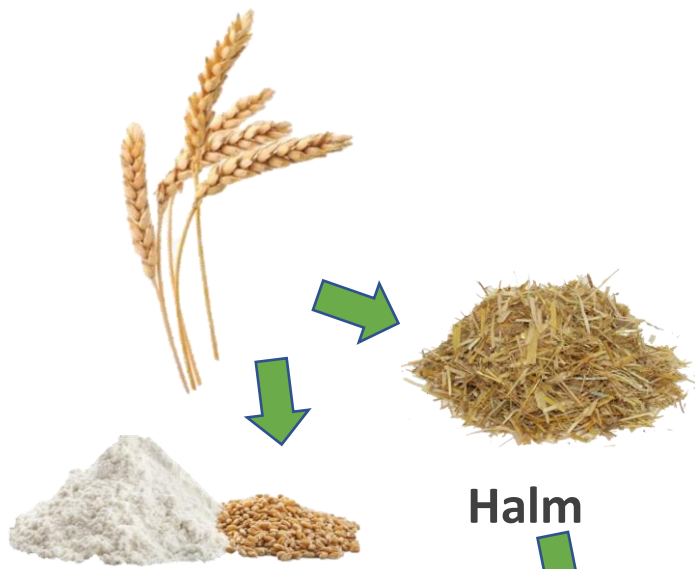




**Non-wood  
biomasse**



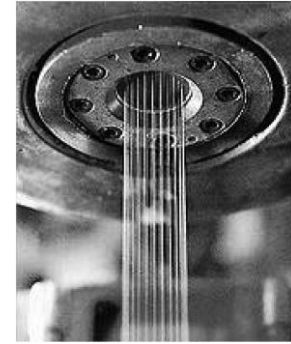
**Græs protein**



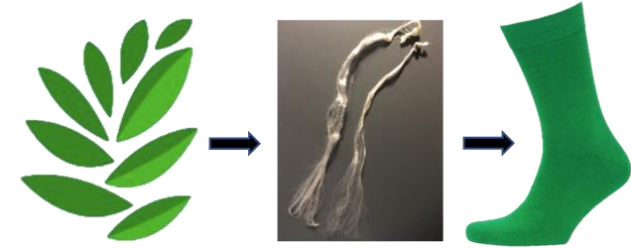
**Halm**



**Cellulose pulp**



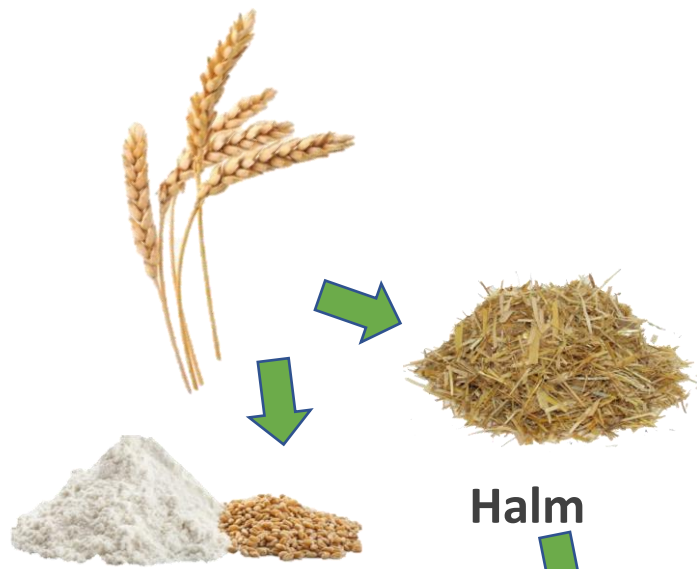
**Bomuld/viscose**







**Non-wood  
biomasse**



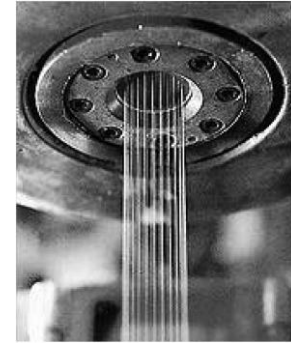
**Halm**



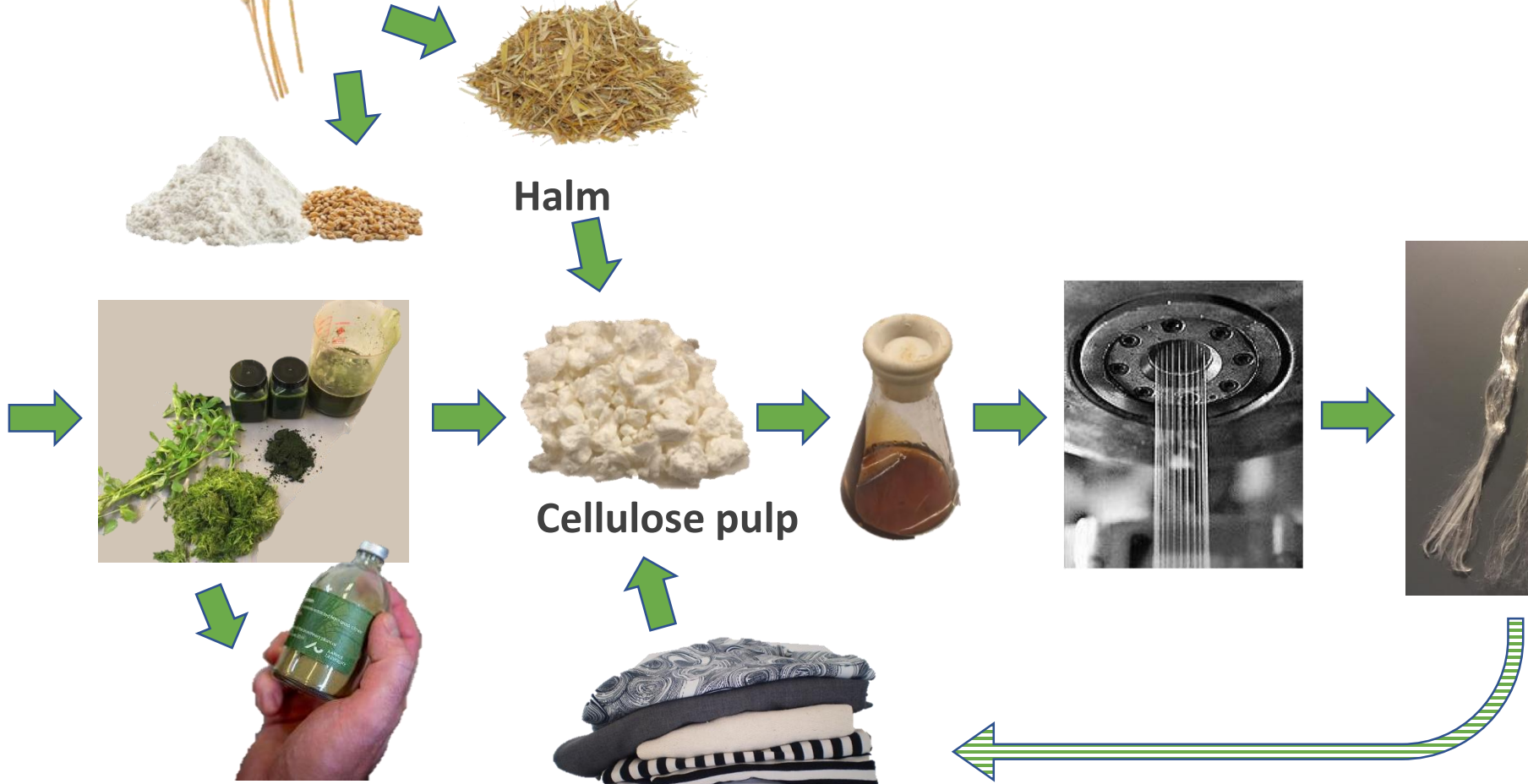
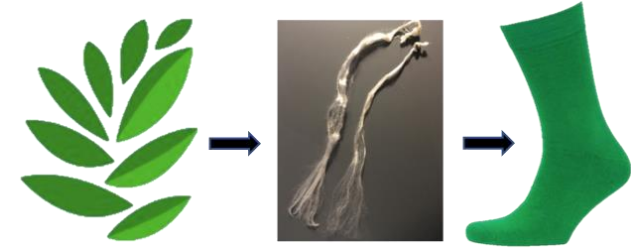
**Græs protein**



**Cellulose pulp**



**Bomuld/viskose**

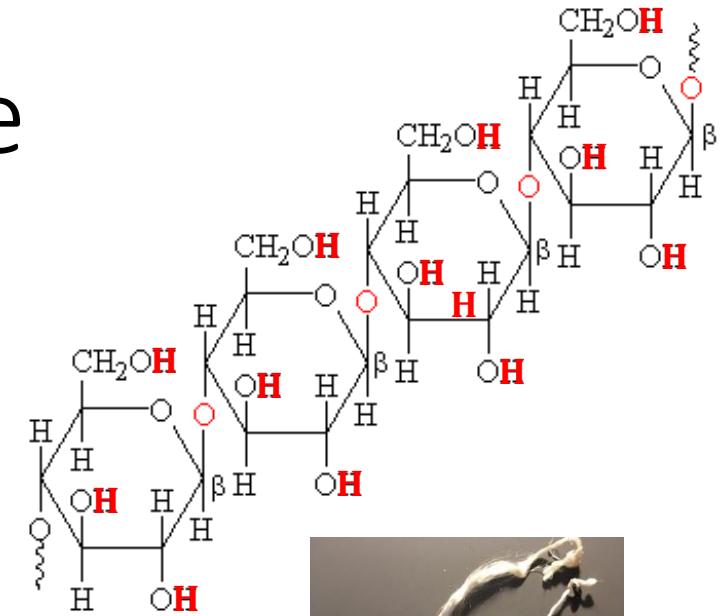


# Fremstillingsmetode cellulose fibre

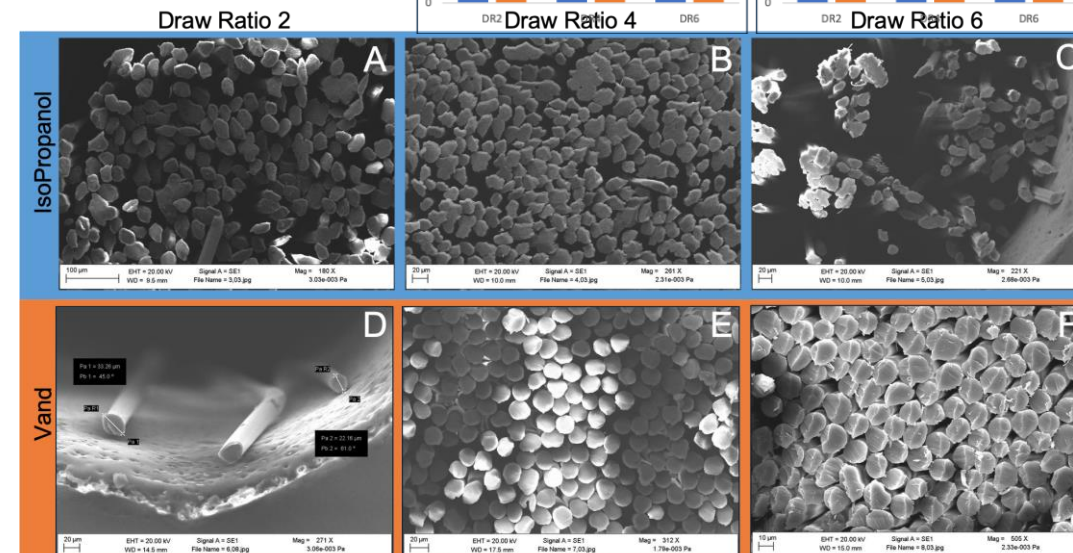
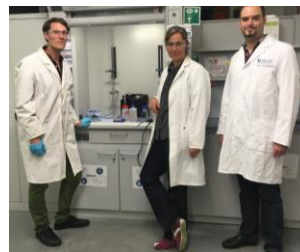
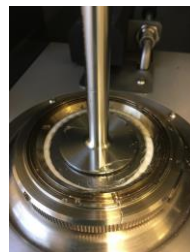
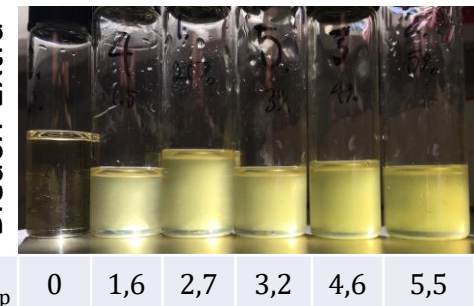
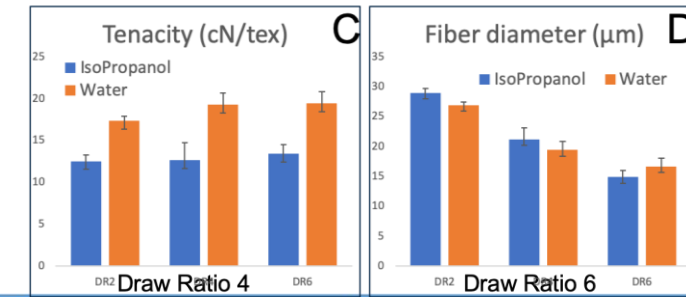
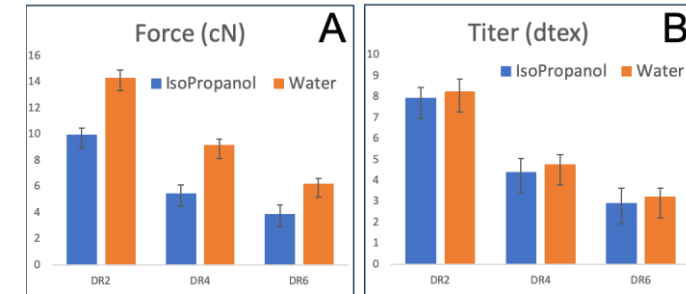
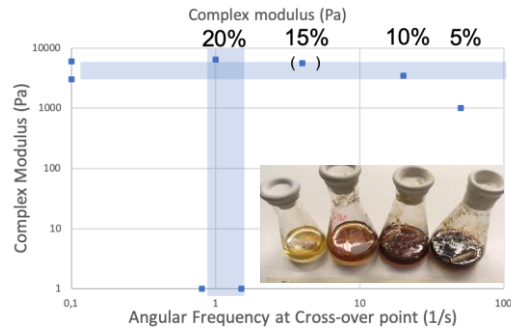
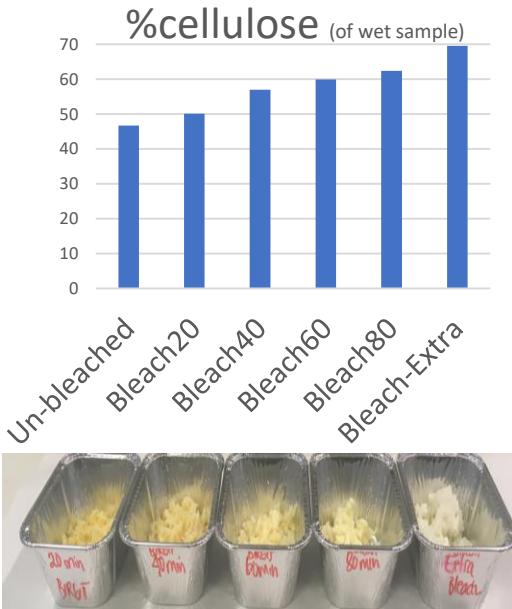
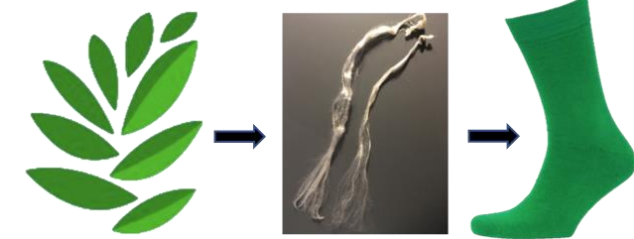


Omdannelse	Navn	På markedet?	Solvent	Krav til raffinering
Indirekte opløsning/derivatisering	Viskose	1905	CS <sub>2</sub> /NaOH	Ren
	Modal/HWM	1950'er	CS <sub>2</sub> /NaOH	Ren
	Acetate	1920'er	CH <sub>3</sub> COOH / H <sub>2</sub> SO <sub>4</sub>	Ren
	Triacetate			Ren
	Carbamate/ InfinitedFiber	<i>In progress</i>	Carbamate	Ren
Komplex	Cupro		Kobber, H <sub>2</sub> SO <sub>4</sub>	
Direkte opløsning	Lyocell/Tencel	1972	NMMO	Ren
	IonCell	<i>In progress</i>	DBHOAc	Ret ren (-aske)
	<i>Ioniske væsker</i>	<i>Research</i>	EmimOAc	Ret ren (-aske)
	<i>BioCelSol</i>	<i>Research</i>	Enzym/ Urea	Ren
Mekanisk neddeling	Spinnova	<i>In progress</i>	Ingen. Mikro-fibrilleret	Ret ren

FiberB  
Fortisan  
High-tenacity Viscose

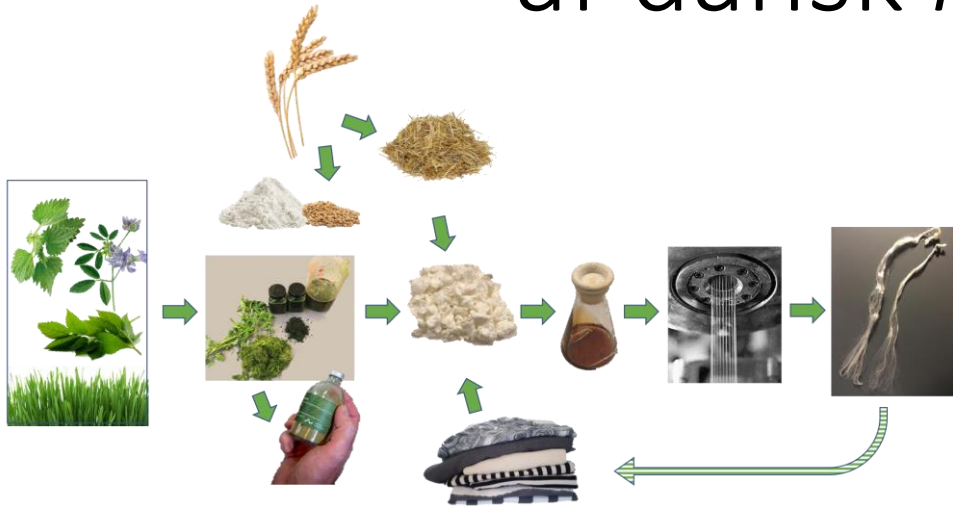
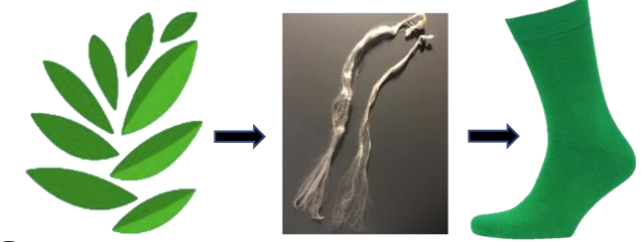


# -af dansk *non-wood* biomasse



# GRØNNE HOSER

## af dansk *non-wood* biomasse



**INBIOM**  
INNOVATIONSNETVÆRKET FOR BIOMASSE

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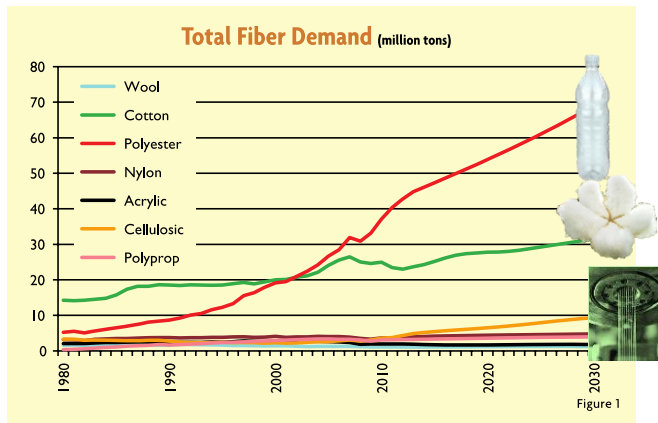
Jena Trading ApS, CVR nr: 35467823

StrømpeKompagniet, CVR nr: 33312156

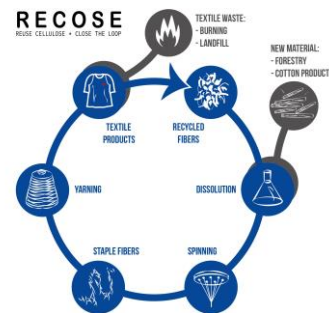
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**STRØMPE  
KOMPAGNIET**



**1st INTERNATIONAL  
CONFERENCE ON  
CELLULOSE FIBRES**  
Technologies, Applications and Sustainability in Textiles  
11-12 February 2020, Cologne (Germany)



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