

# NETFAS PRESENTATION

April 14 2022



Future  
Makers

**Daniëlle Bruggeman** professor Fashion

**Jeroen van den Eijnde** professor Tactical Design

ArtEZ University of the Arts









ArEZ Hogeschool voor de Kunsten

Amsterdam  
Enschede  
Zwolle













ARTEN

ARTEN



ArtEZ University of the Arts

# discover ArtEZ

Menu



EN

🎓 Opleidingen bekijken

📅 Open dagen

ArtEZ University of the Arts

# Team Future Makers



**Daniëlle  
Bruggeman**  
Professor



**Jeroen van den  
Eijnde**  
Professor



**Lucie  
Huiskens**  
Strategic Advisor



**Tjeerd  
Veenhoven**  
Researcher &  
Project Manager



**Jorn  
Konijn**  
Researcher &  
Project Manager



**Michelle  
Baggerman**  
Researcher &  
Project Manager



**Anne  
Hendriks**  
Management  
Assistent



**ArtEZ University of the Arts**



# Short History

- Established in 2015 with the (project)support of the municipality of Arnhem and province of Gelderland
- Focus on sustainable ecosystems for fashion, textile & (product & interior) design
- Artistic and design driven practise-based research
- Collaboration with students, teachers, societal partners, universities (of applied sciences) a.o. Saxion, Wageningen University & Research



# Our research approaches

- Futuring Fieldlabs
- Speculative Spaces





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# Our way of dissemination

- Presentation at the Dutch Design Week



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CHOOSE YOUR  
RAW MATERIAL

- POLYESTER
- COTTON
- AGAR
- HEMP

JELLYFISH

MICELIUM

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CHOOSE YOUR  
RAW MATERIAL

- MICELIUM
- POLYESTER
- COTTON
- AGAR
- HEMP

JELLYFISH

CIRCULAR

WORLD



# Some projects

- The Future of Living Materials → GROW/T
- C-DUTCH (Circular Design using the Cultural Heritage)
- Seagrass for Sustainable Textile Applications
- Bamboo Europe



# Some projects

- **The Future of Living Materials – GROW/T**
  - Collaboration with Wageningen University & Research
  - Public presentation at State of Fashion
  - Living Color (dying with bacteria), Living Leather (made out of fruit waste), Living Skin (mycelium-based fabrics), Living Systems (natural structures), Living Waste

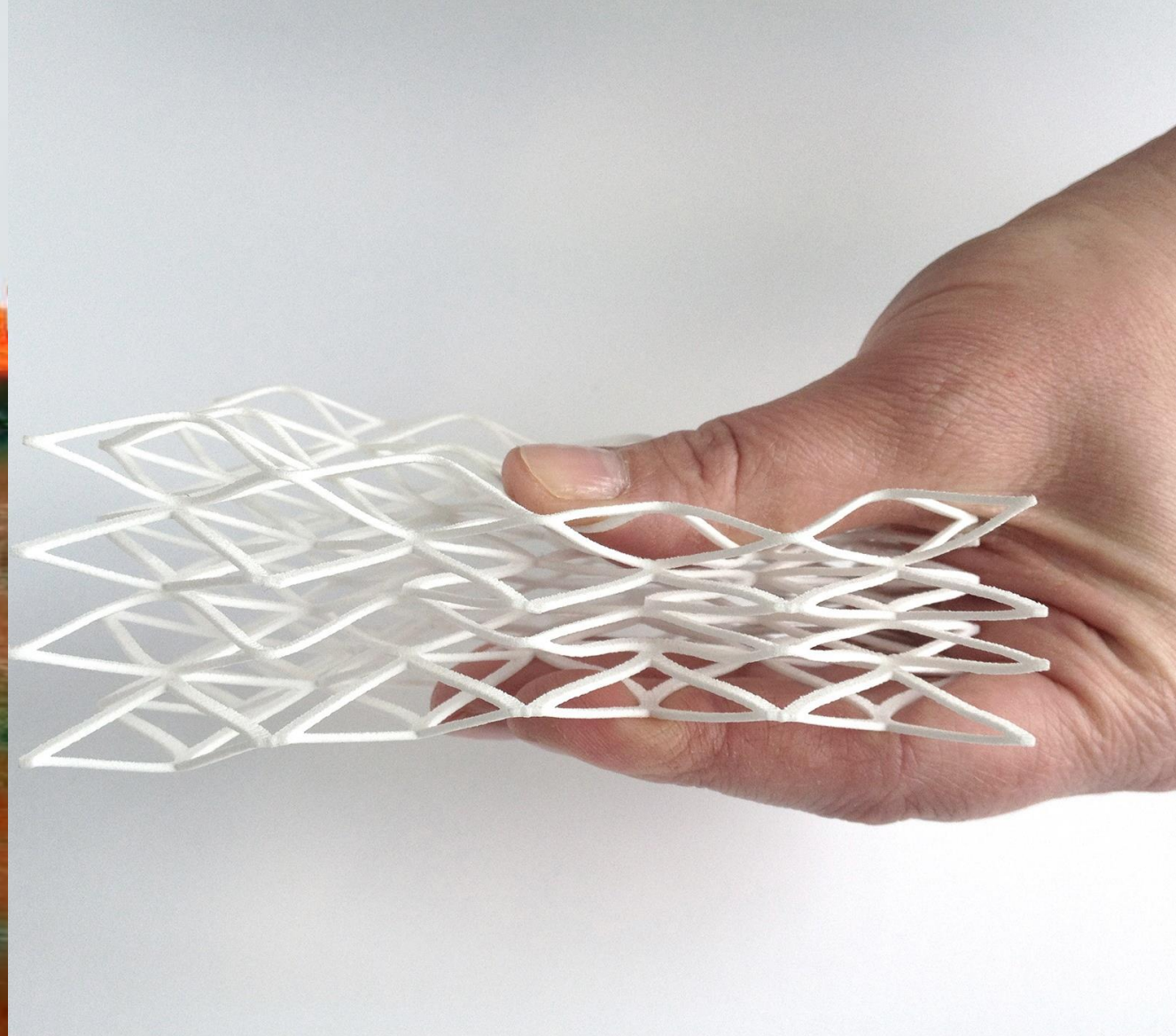




Credits – Laura Luchtman & Ilfa Siebenhaar



Credits – Emma van der Leest



Credits – Lilian van Daal













VIDEO LIVING SKIN



Credits - Mycotex by Aniela  
Hoitink, Karin Vlug





# Some projects

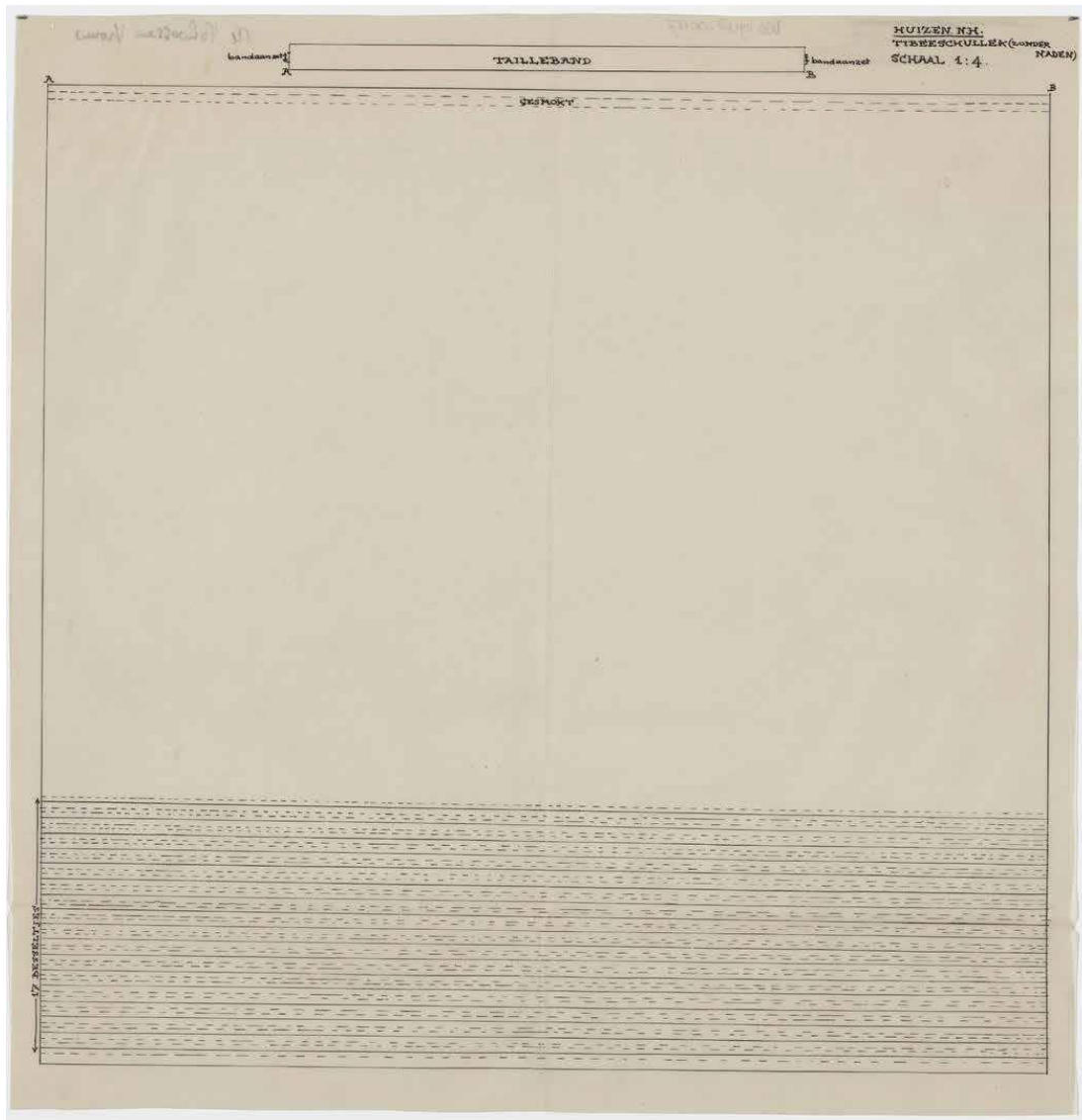
- **C-DUTCH (Circular Design using the Cultural Heritage)**
  - Collaboration with Holland Air Museum
  - Exploring old materials, technologies & societal behaviour for sustainable and circular innovations
  - 4 designer-researchers (Michelle Baggerman, Tjeerd Veenhoven, Ineke Hans, Noud Sleumer)
  - 20 BA students ArtEZ Product Design



**THE APRON COULD  
BE THE ULTIMATE  
SUSTAINABLE GARMENT**



Credits – Michelle Baggerman

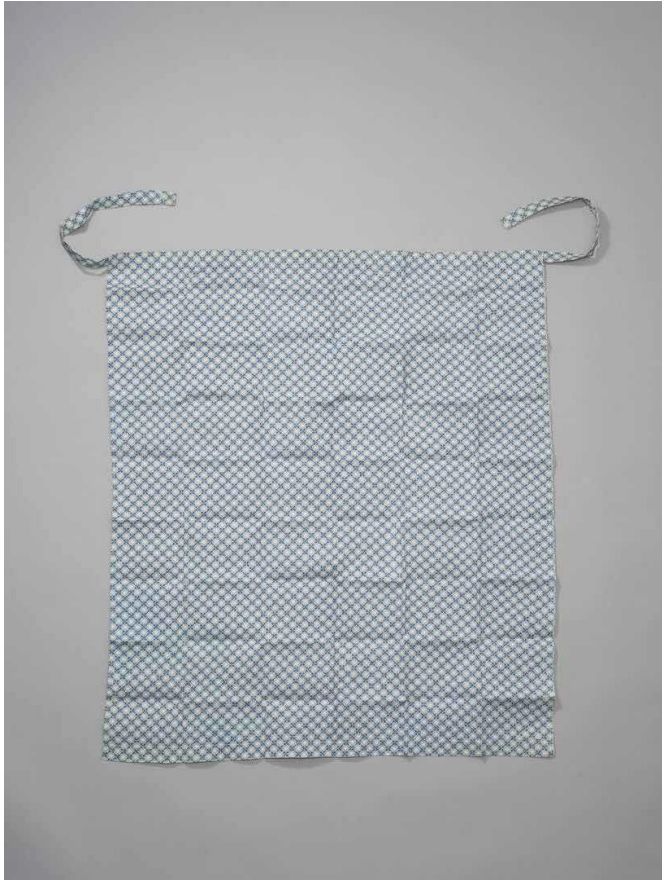


**ZERO WASTE DESIGN**



Credits – Michelle Baggerman





**EXPANDABLE: FITS ANY SIZE**

Credits – Michelle Baggerman

Credits – Michelle Baggerman

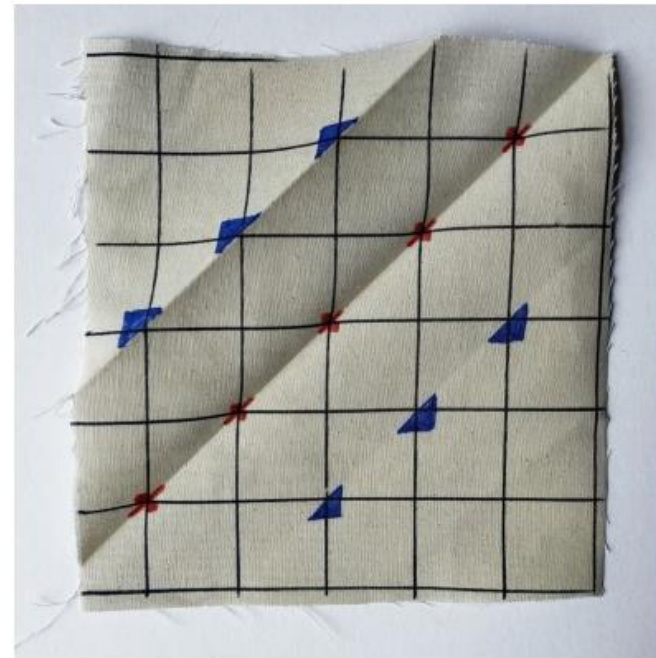
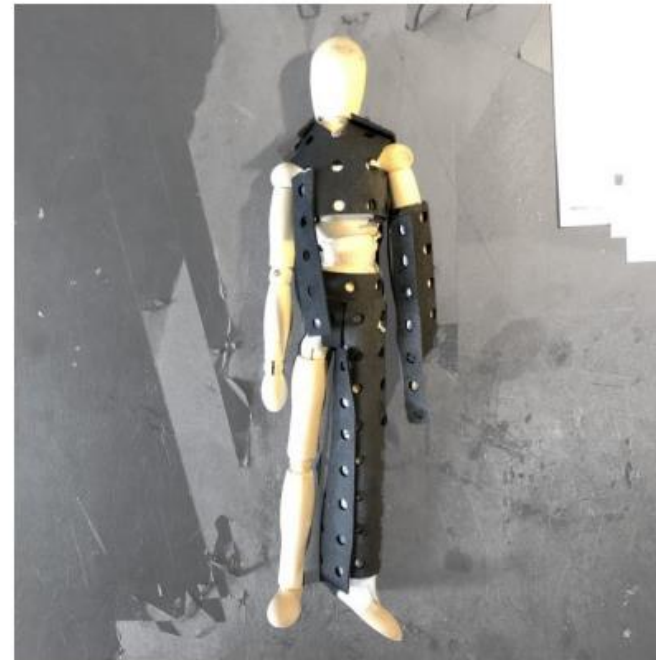


**RECYCLING AND UPCYCLING  
MATERIALS**



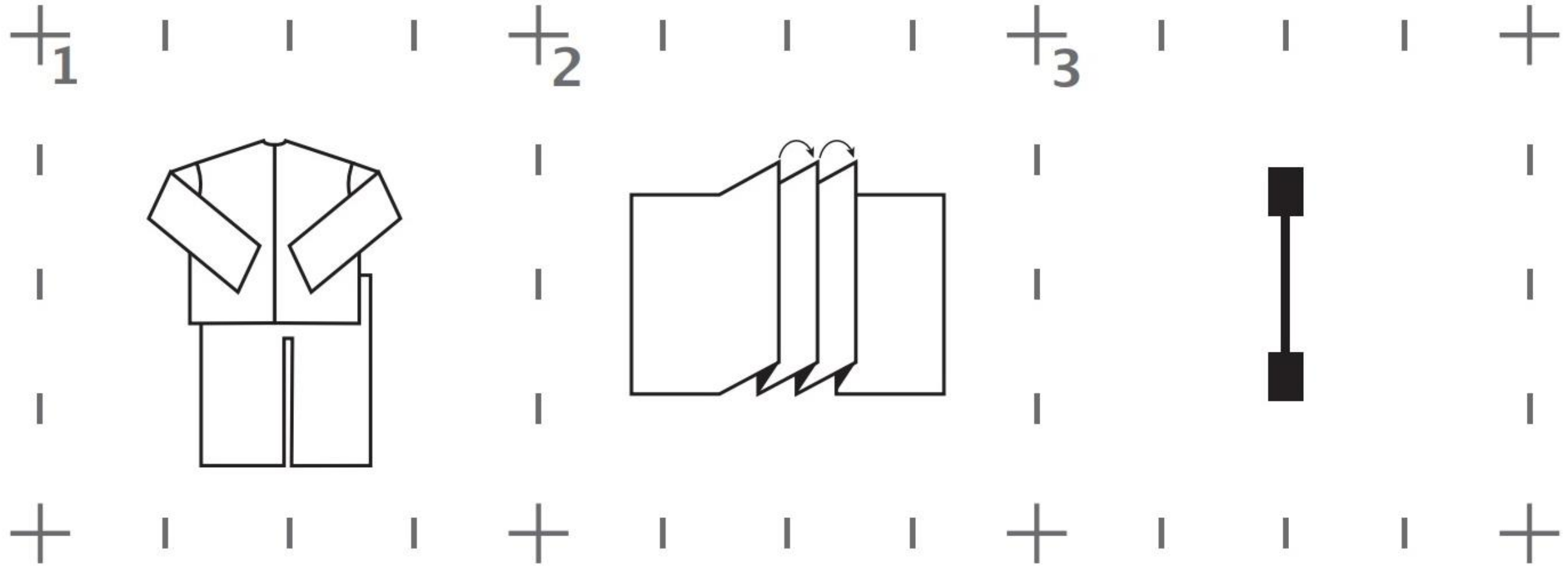


**EASY TO MAKE, MEND AND CUSTOMISE**



Credits – Hanne van Beers  
& Max Claassen





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& Max Claassen

Future Makers  
Uniformal Expressions  
Hanne van Beers & Max Claassen  
picture: IMG\_7163.JPG  
IMG\_7166.JPG  
20/05/2020



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& Max Claassen





Future Makers  
Uniformal Expressions  
Hanne van Beers & Max Claassen  
picture : IMG\_7355.JPG  
IMG\_7368.JPG  
20/05/2020



Credits – Hanne van Beers  
& Max Claassen

# Some projects

- **Seagrass for Sustainable Textile Applications**
  - Collaboration with Fieldwork Company, Wageningen University & Research, Fatboy
  - Exploring a bio-material from the past and the future





Nederland in 2020 versus Nederland in 2120



Nederland heeft zich altijd goed kunnen aanpassen aan het klimaat, maar de toename van de uitstoot van broeikasgassen en de opwarming van de aarde door menselijk handelen zijn ongekend. De stijgende zeespiegel, een grotere kans op weersextremen en de oplopende temperatuur bedreigen de economie en het welzijn in ons land. We hebben geen tijd te verliezen en moeten ons sterk maken voor mitigatie en adaptatie, ofwel: broeikasgasesmissies terugdringen en aanpassingen realiseren om de gevolgen van de klimaatverandering het hoofd te bieden.

Door klimaatverandering gaat de ruimtelijke inrichting van Nederland steeds meer knelen. We worden geconfronteerd met wateroverlast door extreme regenbuien, droogte en warmtestress door hittegolven en een daling van veenbodems. De zeespiegelstijging vergroot het risico op overstromingen en opwellend water en leidt tot toenemende verzilting van het kustgebied. De infrastructuur die ons land hiertegen beschermt vereist dringende

### De Noordzee

- Ontwikkeling aquacultuur  
-in combinatie met wind op zee
- Ontwikkeling oesterterrassen en biodiversiteit  
-in combinatie met wind op zee
- Verbetering bodem en biodiversiteit  
-in combinatie met wind op zee
- Natuurgebieden op zee

- Energietransitie op zee  
-Wind op Zee, drijvende zonnepanelen
- Scheepvaartroutes  
-Inclusief nieuwe routes naar het Noorden
- Drijvende servicehubs en voorzieningen
- Duurzame visserij

### Zuidwestelijke Delta

- Zachte kustverdediging in combinatie harde infrastructuur
- Ontwikkeling zoetwaterbuffers op basis van oude krekenpatronen
- Dubbele dijksystemen wisselpolders
- Kringlooplandbouw zoet en zout met gescheiden watersystemen en groenblauw raamwerk
- Grootchalige zoet-zoutgradienten en vergrote connectiviteit bekken
- Nieuwe kering en nieuwe dynamiek strategisch sedimentmanagement

### Rivierengebied

- Versterking IJsselafvoer en -vallei
- Ruimte voor de rivier buiten en binnendijks (moeraszones)
- Vergroting getijdengebied Biesbosch

- Kringlooplandbouw met groenblauw raamwerk
- Versterking gradienten Maasdal

# NL 2120

## Een natuurlijker toekomst voor Nederland in 2120

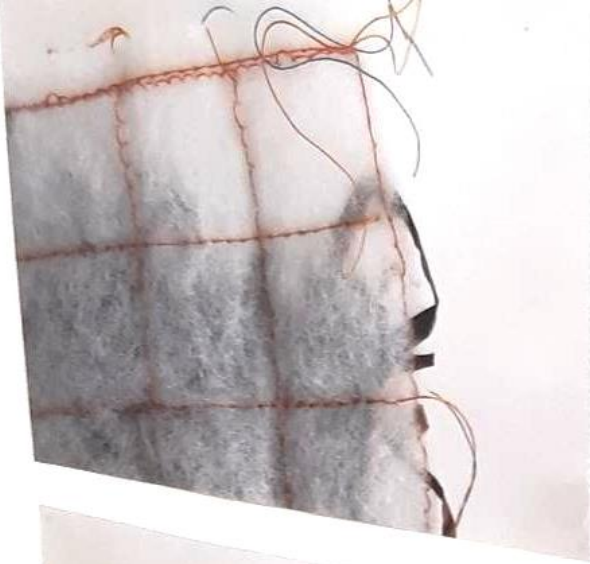












Seagrass has been used as a filling material for mattresses, pillows, walls and packages for ages. This means that seagrass has been around us for a long time, yet it is not a very known material. Due to the specific properties of seagrass, this material is mostly hidden out of sight. However, there is a certain beauty in seagrass that needs to be shown, because of how it looks, but more importantly because of the importance of using sustainable materials. I took Fatboy as an example, a company that is interested in working more with sustainable materials as filling. The very recognizable products that Fatboy makes don't necessarily radiate 'sustainable', which is something that needs to change when sustainable materials will be used. By reusing some of Fatboys most iconic objects out of see-through fabric and filling that fabric with seagrass, I want to normalize the 'eco-look' in products, instead of wanting to hide it. These products are not meant to be used as an object to sell or produce, rather as statement pieces to let users know what material their new products will be made of and showcasing the beauty of what is inside.

Birgit Rijmsus

## THE HIDDEN BEAUTY OF SEAGRASS





Credits – Lisanne Peters

# Some projects

- **Bamboo Europe**

- In collaboration with BambooLogic (EU bamboo plantation), 4 design studio's, 1 furniture company, 2 bamboo processing companies, 1 sustainable coating company, 3 research institutes;
- Exploring the possibilities for the first transparent & sustainable value chain for bamboo from plant and fiber to textile and interior applications



# Intended impact

- CO2 reduction
- Transparant supply chain
- Traceability and Certification
- Optimal use of the material (construction/textile)
- Validated innovations
- Closing the loop



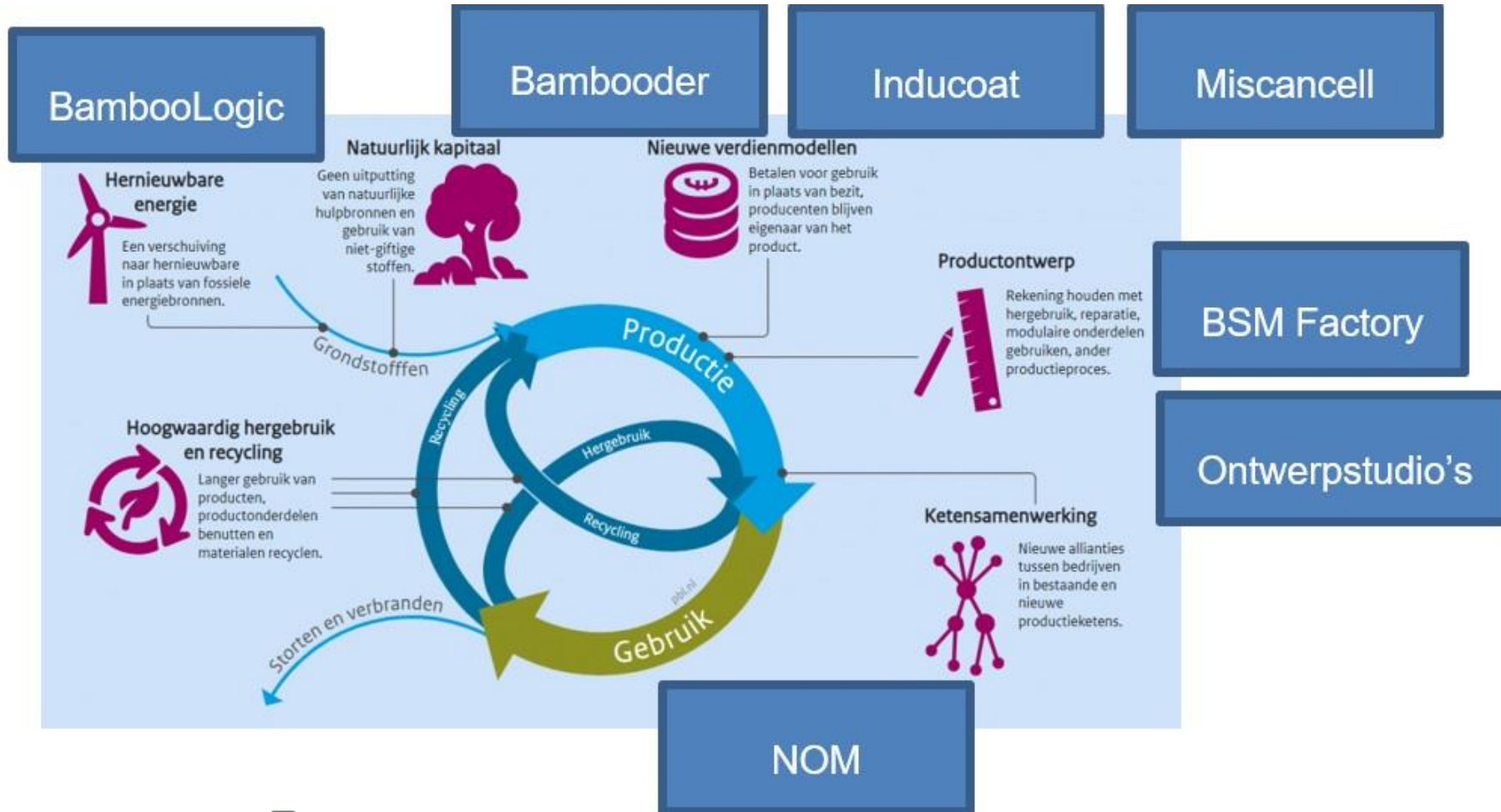






# Bamboo Europe

## Doel en beoogde impact van het onderzoek





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Thanks for your attention  
will be continued by Daniëlle Bruggeman

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