OceanSafe AG, Bern

Durch Design zum zirkulären Produkt

We are the future!

**We are the only true alternative
for the global textile industry.**

It's not about being green...
and for sure we are not giving us a green makeover.
Also we are not eco-romantics.

We think and act economically.
We help our customers develop safe products for the
mainstream shopper who likes to consume –
without a bad conscience.

OceanSafe products are beautiful and good,
and they are nutrients for next generations.

**Manuel Schweizer
Founder OceanSafe**

Problem: **Textile industry's impact on the environment**

100 billion+ pieces of textiles are manufactured per year. Production is forecasted to double again by 2030, fueled by "fast fashion".[1]
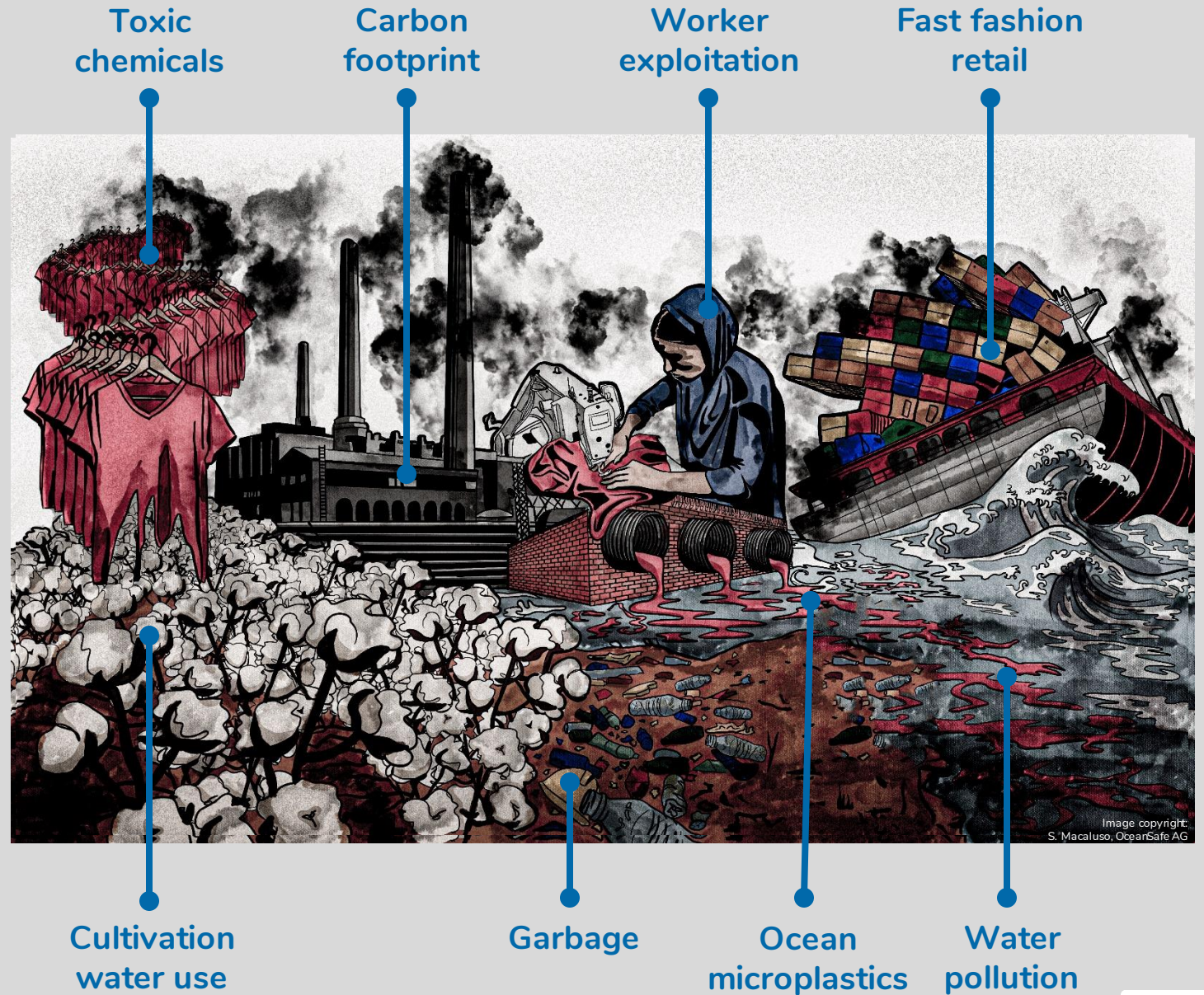
35% of **microplastics** found in the world's oceans can be traced back to synthetic textile fibers.[2]

20% of the world's **water pollution** is a result of industrial sewage from the textile industry.[3]
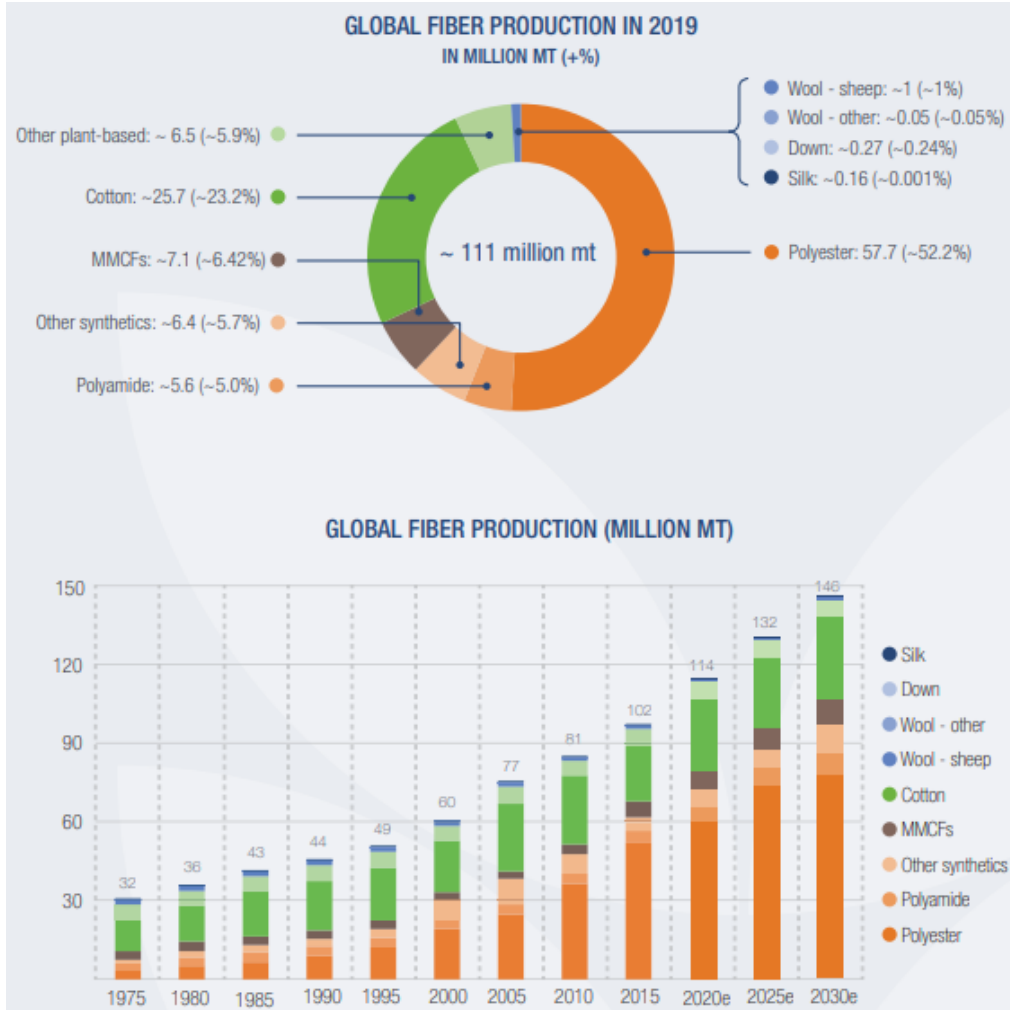
80% of **used textiles** are incinerated, end up in landfill or directly in nature. Only 1% of textiles are recycled into new garments.[4]

The industry produces **1.2 billion tons of CO2** annually, around 5% of total global emissions. That is more emissions than international flights or maritime shipping.[5]

[1] McKinsey & Company, 2016
[2] Boucher & Friot, IUCN, 2017
[3] World Bank, 2019
[4] Dutch Ministry of Foreign Affairs, 2020
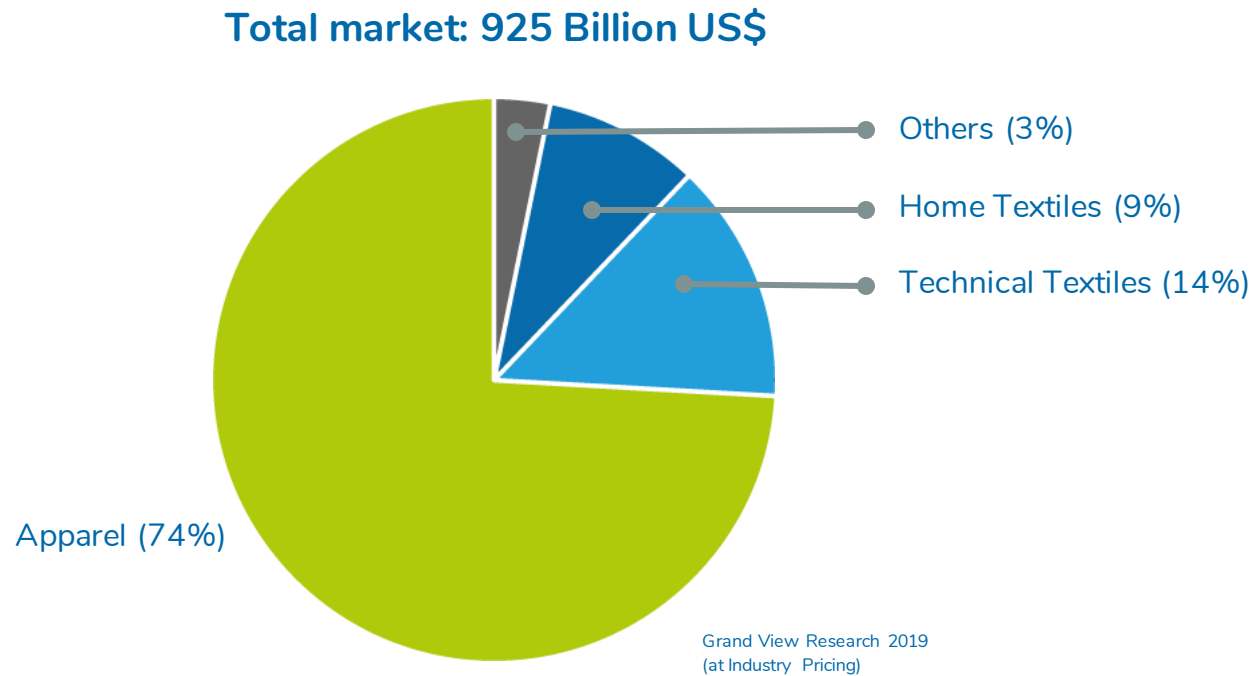[5] Nature Climate Change, 2018

3

Toxic chemicals

Carbon footprint

Worker exploitation

Fast fashion retail

Cultivation water use

Garbage

Ocean microplastics

Water pollution

Image copyright:
S. Macaluso, OceanSafe AG

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Booming global textile market:
Main growth in polyester

GLOBAL FIBER PRODUCTION IN 2019
IN MILLION MT (+%)

- Other plant-based: ~ 6.5 (~5.9%)
- Cotton: ~25.7 (~23.2%)
- MMCFs: ~7.1 (~6.42%)
- Other synthetics: ~6.4 (~5.7%)
- Polyamide: ~5.6 (~5.0%)

- Wool - sheep: ~1 (~1%)
- Wool - other: ~0.05 (~0.05%)
- Down: ~0.27 (~0.24%)
- Silk: ~0.16 (~0.001%)

~ 111 million mt

- Polyester: 57.7 (~52.2%)

GLOBAL FIBER PRODUCTION (MILLION MT)

- Silk
- Down
- Wool - other
- Wool - sheep
- Cotton
- MMCFs
- Other synthetics
- Polyamide
- Polyester

32 36 43 44 49 60 77 81 102 114 132 146
1975 1980 1985 1990 1995 2000 2005 2010 2015 2020e 2025e 2030e

Textile Exchange
Global Fiber Material Market Report, 2019
MT = Metric Ton

- The global textile demand is continuously on the rise, fueled by apparel demand from Asian developing economies.

- Natural fiber expansion is limited due to lack of cultivable acreage.

- Additional demand will need to be satisfied by conventional synthetic fibers, such as polyester.

OceanSafe

Apparel dominant global textile application segment

Total market: 925 Billion US$

Others (3%)

Home Textiles (9%)

Technical Textiles (14%)

Apparel (74%)

Grand View Research 2019
(at Industry Pricing)

Addressable Market

Technically, 80% (volume) of the world's yarns can be substituted with yarns based on OceanSafe technology.

Our objective:

- **1% global market share** in home textiles
- **0.5% global market share** in apparel and technical textiles

OceanSafe

Solution:
Making products circular

Background: Circular economy and products

The circular economy is an economic system aimed at eliminating waste and the continual use of resources. Circular systems employ product reuse, sharing, repair, refurbishment, remanufacturing and recycling to create a closed-loop system.

The circular approach is in contrast to the traditional linear economy, which has a "take, make, dispose" model of production.[1]

The **Circular Economy Action Plan** is on the European Union's political agenda and part of the bloc's European Green Deal, announced in 2020.

The commission also plans imposing a **carbon border tax** for carbon-heavy imports. This would promote circularity and onshore production. [1] [2]

[1] Wikipedia
[2] Lee, Magnus, Business of Fashion, A More Circular Fashion Industry Will Require a Collective Effort, 2021
[3] https://ec.europa.eu/environment/circular-economy/

Background: Cradle to Cradle^{TM} (C2C)

C2C is the school of thought for circularity and a certification system. It was developed in the 1990s by the German chemist Dr. Michael Braungart, as a product design philosophy.

Products fall into one out of two cycles:

- Products in the **biological cycle** must be fully biodegradable after use (e.g. consumables, such as textiles or packaging).

- Products in the **technological cycle** are easy to dissemble. Components are reused to manufacture new products on the same or higher quality level. (e.g. electronics, cars, furniture)

The C2C certification assesses five criteria:

- Material health

- Material reutilization

- Renewable energy and carbon management

- Water stewardship

- Social fairness

The assessment results in product achievement levels Basic, Bronze, Silver, Gold or Platinum.

A holistic fast-track
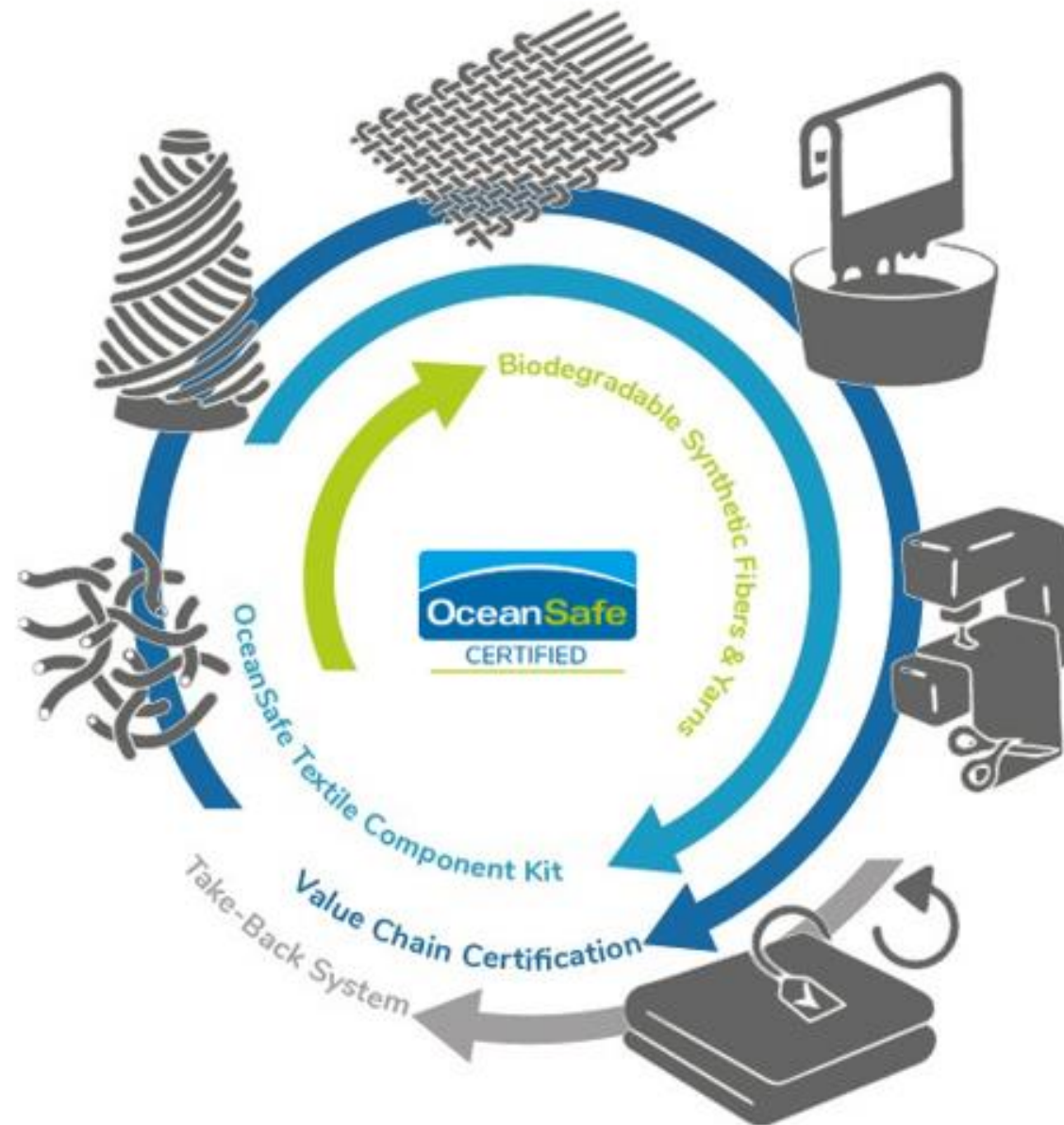
Deep Dive: Textile value chain & employed certifications

In contrast to certifications known on the market, OceanSafe takes into account the entire chain and all relevant criteria.

Solution:
OceanSafe's Textile Component Kit

After eight years of R&D on textile materials and processes along the entire value chain, we now have a **truly circular solution** for the industry.

OceanSafe's Textile Component Kit. It contains market-ready, industrialized **textile components** which are the basis for various final products. All components are circular, 100% biodegradable and toxin-free.

- 18 filament and staple yarns made from synthetic and natural fibers

- Natural dyes

- Textile chemistry and additives, for all production applications from spinning to confection

- Trims and accessories, such as buttons, labels or 3D printed hooks

- Consumer and transport packaging

OceanSafe's Textile Component Kit allows the **substitution of 80% (volume) of today's textile world market applications.**

Core innovation is our proprietary development of **biodegradable synthetic fibers** from fossil and renewable, bio-based raw materials.

1. **OceanSafe Synthetic V1.0 - Polymer fibers**

2. **OceanSafe Synthetic V2.0 – Biolopolymer fibers with flame retardant properties**
   New Cotton

Our solution – the product

Synthetic cotton-like textile fiber

- Based on petroleum or agricultural waste

- Biodegradable

- Toxin-free and hence no potential health impact

Feels like cotton

Absorbs water like cotton

35% lower cost compared to organic cotton

Who will still need cotton?
**And with cost and supply no longer an issue: Who will even want polyester?**

Solution:
OceanSafe's Textile Component Kit

Our circular textile industry solution:
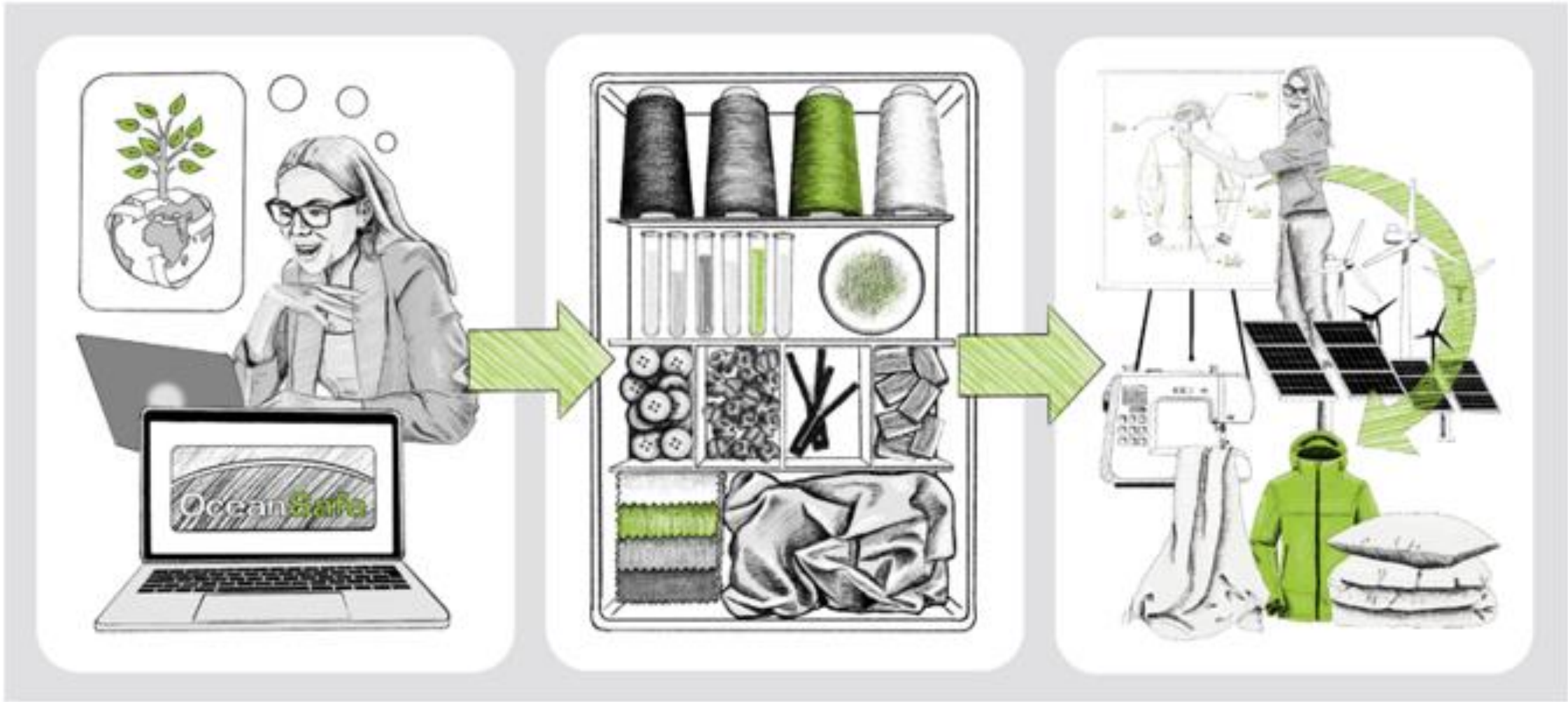**OceanSafe's Textile Component Kit.**

It contains:

- Synthetic and natural fibers

- Filament and staple yarns

- Natural dyes

- Textile chemistry and additives

- Trims and accessories

- Packaging

**All components are biodegradable,
toxin-free and circular.**
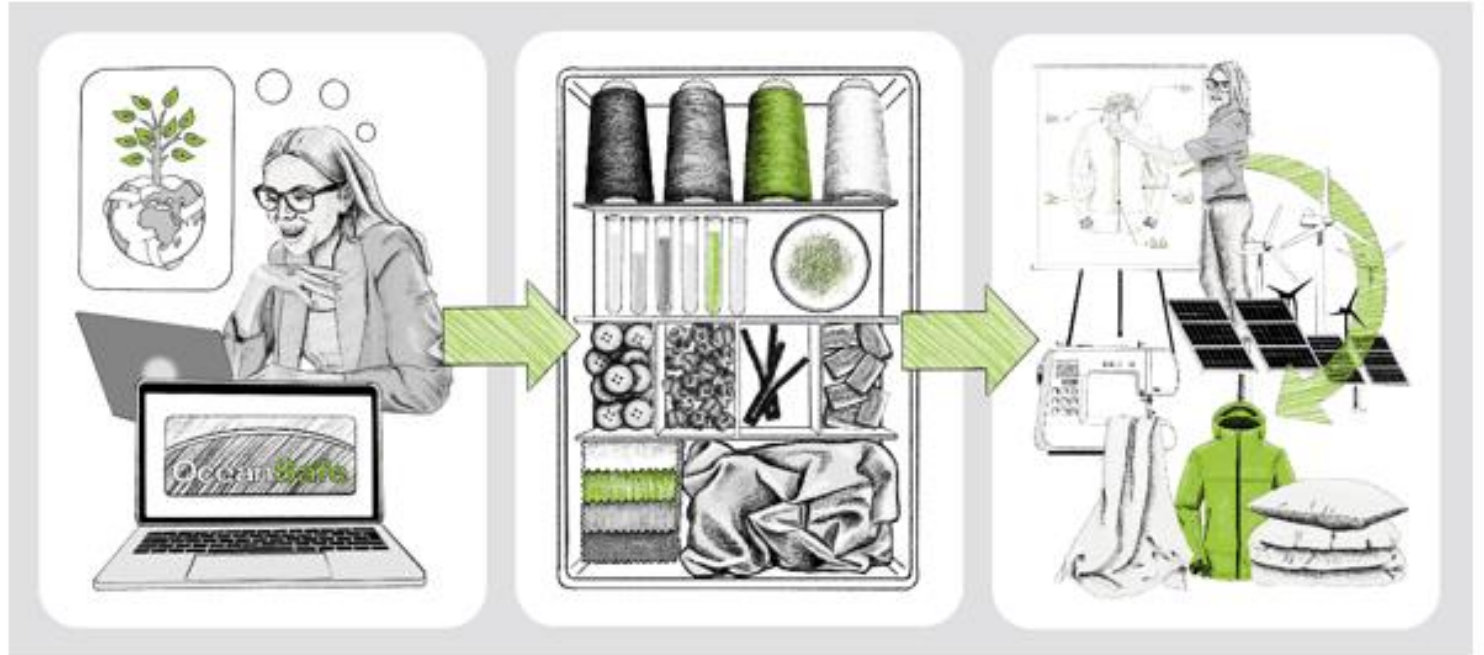
The Tool for Brands and Designers

Take-back system: QR code

Every finished product carries an **individualized QR code** (e.g. on care label). End consumers scan this QR code to access information on the return process.

- OceanSafe generates a custom QR code for each production lot.

- Licensees are obliged to attach this custom QR code firmly to the product, e.g. together with the care label

- The scan label must sustain the typical numbers of wash cycles expected throughout product life cycle.

Take-back system: Digital platform

OceanSafe operates a **digital platform** where consumers access information on the return process. Licensees provide details, incentives and shipping instructions.

- Scanned QR codes link to the OceanSafe take-back platform.

- Each licensee can customize the platform's content

- Licensee provides instructions on take-back and return options, e.g. store return or shipping to central collection points.

- Consumers can download shipping labels

- Consumers receive incentives to purchase new products, e.g. through coupons or discount codes.

Pilot Product Range

OceanSafe initiated a pilot **product range** to show feasibility and marketability of its concept.

The existing product range is ready to sell from stock:

- Bed linen sets
- Terry towels
- Bath robes
- Prefabricated curtains

Business model

Revenue sources

We are transitioning from a pre-financed stock model to a capital-lighter licensing model.

- **Stock model (B2B Sales)**
  Direct supply to brands, retailers and manufacturers from stock
  €1.0 million B2B sales realized (as of 01/2021)
  Global rollout with interior brand JAB Anstoetz in 01/2021

- **Licensing**
  Royalty revenues secured by license agreements with brands/retailers
  Customers' final products carry OceanSafe Quality Seal.
  OceanSafe defines standards, certifies, consults and audits.

Target industries

- **Step 1: Home textiles** (B2B sales + Licensing)
  We first exploit our existing customer base and network in the home textile industry.

- **Step 2: Technical textiles** (B2B sales + Licensing)
  Custom developments for sun protection and blinds
  Contract, hospitality and public applications

- **Step 3: Apparel and industry applications** (Licensing only)
  Partnership with brands and retailers
  - Clothing (fashion, workwear, outdoor, functional garments)
  - Specialized industries (e.g. automotive, furniture, medical)

Organizational structure

OceanSafe AG (Bern/CH)
- Owns **patents, trademarks and know-how** (e.g. recipes, process knowledge)
- Licensor of IP to brands and retailers

OceanSafe GmbH (Krefeld/GER)
(100% owned subsidiary of OceanSafe AG)
- Acts as **operational unit** within EU
- R&D, design, sourcing, QC, logistics, factory certification and auditing
- Marketing, sales to B2B channels
- Supports with customer product take-back systems

DDF / Deco Design Fürus GmbH (Krefeld/GER)
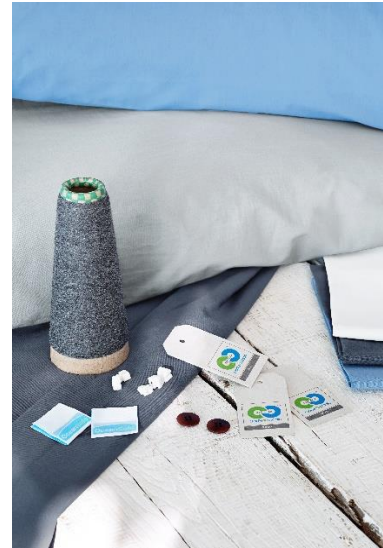(100% owned by Founder)
- Germany-based **wholesaler for textile components**, founded in 1991. Global home textile customer base.
- Warehousing, logistics, office and administrative backbone for OceanSafe GmbH
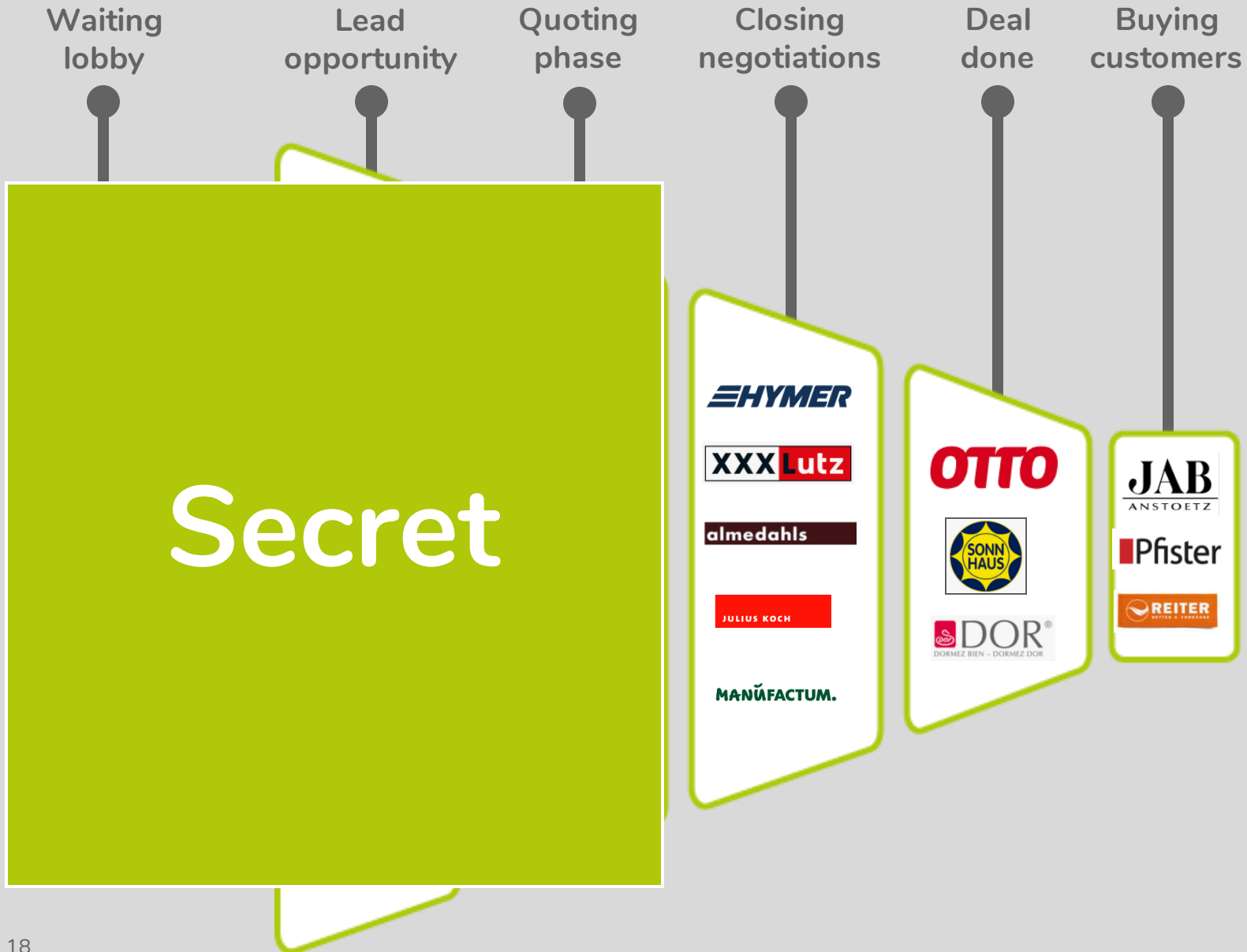
Pilot product range

OceanSafe initiated a pilot **product range** to show industrial feasibility and marketability of its concept.

The existing product range is ready to sell from stock:

- **Finished products**
  Bed linen sets, terry towels, bath robes and prefabricated curtains.

- **Textile components**
  Sheer, decoration, upholstery and fashion fabrics. Sewing yarns, trims and accessories.

Waiting lobby — **Lead opportunity** — **Quoting phase** — **Closing negotiations** — **Deal done** — **Buying customers**

Secret

Sales funnel

Structured sales process for B2B sales and license opportunities.

Initial focus on existing product, shifting gradually to custom, licensed solutions.

Exploiting German-speaking markets, expanding to EU and global geographies.

Why work with OceanSafe?

OceanSafe standards & certification

Patented biodegradable textile fibers

Why OceanSafe?

Fully certified value chain

OceanSafe Textile Component Kit

We look forward to working with you.

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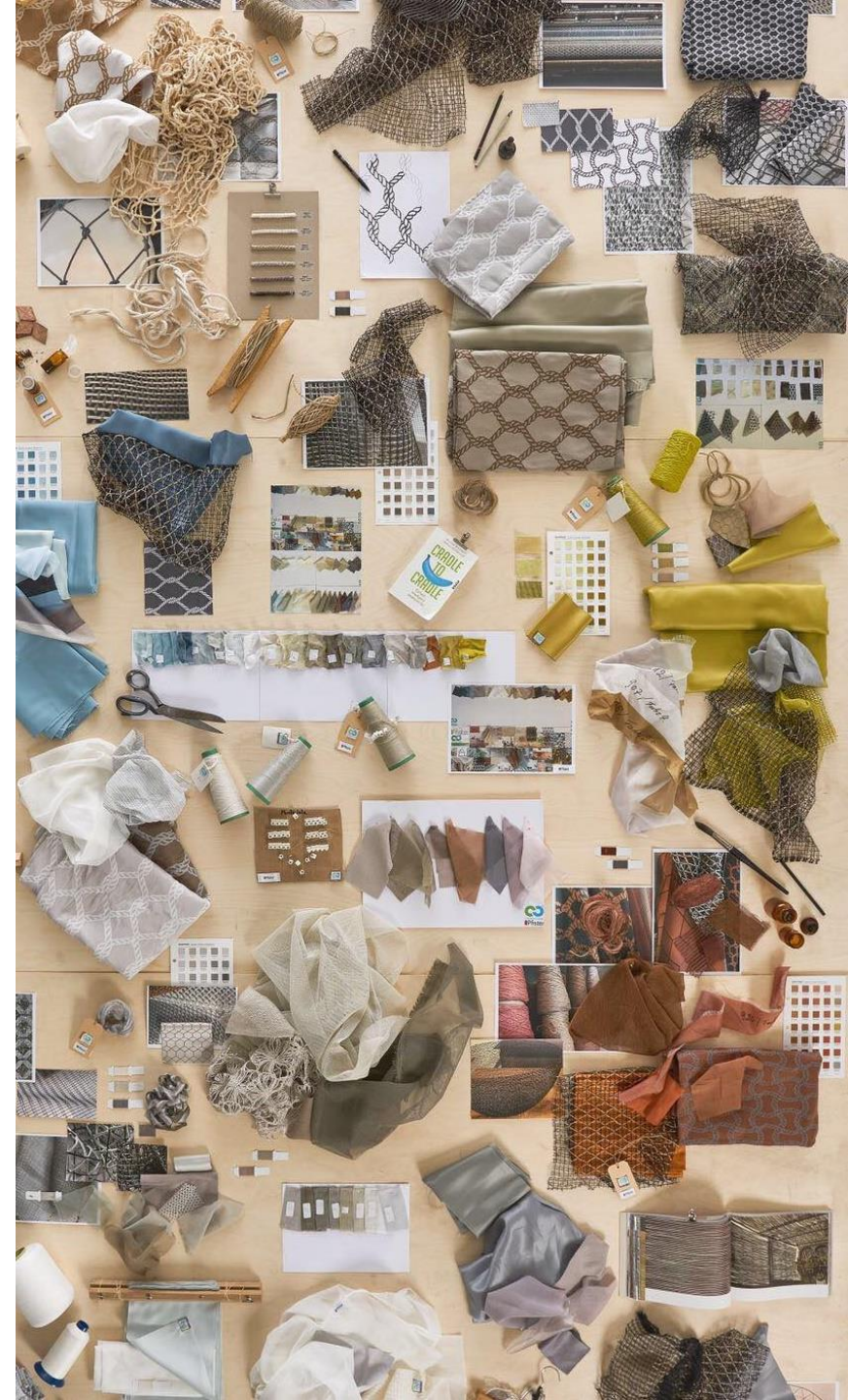
**DAS MATERIAL DER ZUKUNFT:
MIT TEXTILIEN ZUM
NACHHALTIGEN UNTERNEHMERTUM**

20.9.2021, STUTTGART
HOUSE OF SWITZERLAND

SO SCHWEIZ!

IN COLLABORATION WITH

**SWISS
TEXTILES**

Design Preis Schweiz
Prix Design Suisse
Design Prize Switzerland

design
preis
schweiz

südwest
textil

AFBW
Allianz Faserbasierte Werkstoffe
Baden-Württemberg e.V.

Aperitif