

Wearing
Nature



**FREY
ZEIN**



Wearing
Cellulose

We enable the textile industry to produce
outdoor wear free from any plastics.

A large pile of discarded clothing and fabric scraps, illustrating the problem of textile waste. The pile is composed of various colors and textures of fabric, including white, grey, black, blue, and red. The background is a blurred, light-colored surface, possibly a concrete floor or a large pile of similar waste.

**All outdoor clothes
contain toxic plastic.**

**These clothes are mostly trashed
at the end of product life.**

**This is creating a big problem
for all life on the planet.**

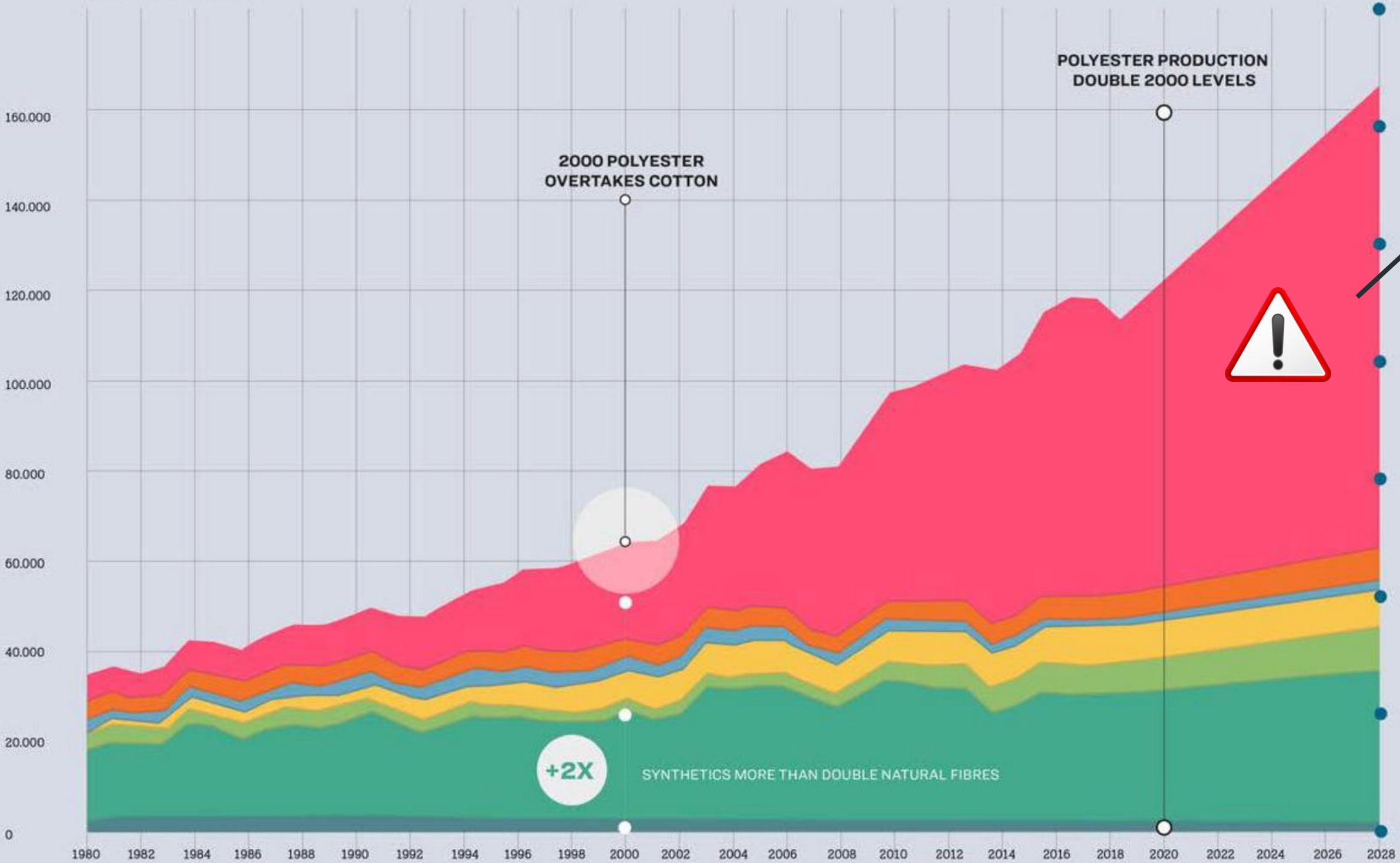
FAST FASHION AND THE RISE OF POLYESTER

THE MAJORITY OF FIBRE PRODUCTION IS SYNTHETIC AND COMES FROM FOSSIL FUELS

WORLD FIBRE PRODUCTION BY FIBRE TYPE 1980-2030

THOUSAND METRIC TONS

(Source: Tecnon OrbiChem)



Polyester is dramatically overused in fabrics, causing widespread pollution from the mountains to the oceans



source: cotton analytics

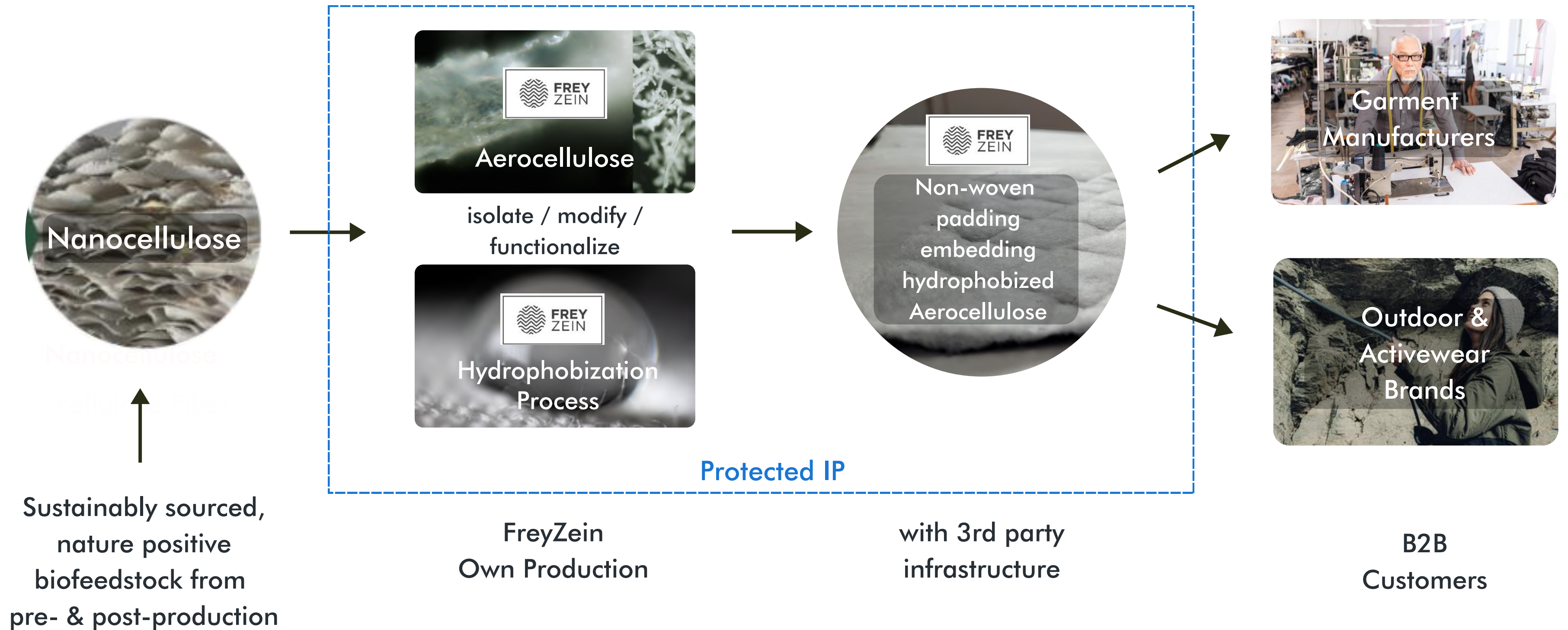


We create 100 % natural, premium performance fabrics by enhancing cellulose, the world's most abundant biopolymer.



TECHNOLOGY

Our core value is the technology to isolate, modify, and functionalize cellulose and its chemical and physical derivatives, such as nanocellulose. By carefully selecting the appropriate bio feedstock, we enable customers to produce performance outdoor wear free of plastics.





PRODUCTS with our TECH

FreyZein® TerraDown™

100% Natural Thermal Insulation

Coming 2025



NATURAL THERMAL PERFORMANCE

- Made to Flex with the Seasons
- Powered by Aerocellulose.
- Reducing Environmental Impact



Light weight



Performs when wet



Thermo Regulating

ideal for

- Outerwear
- Accessories
- Sportswear
- Equipment

FreyZein® TerraTech™

100% Natural DRW Multilayer Technology

Coming 2026+



MADE FOR OUTDOOR PERFORMANCE

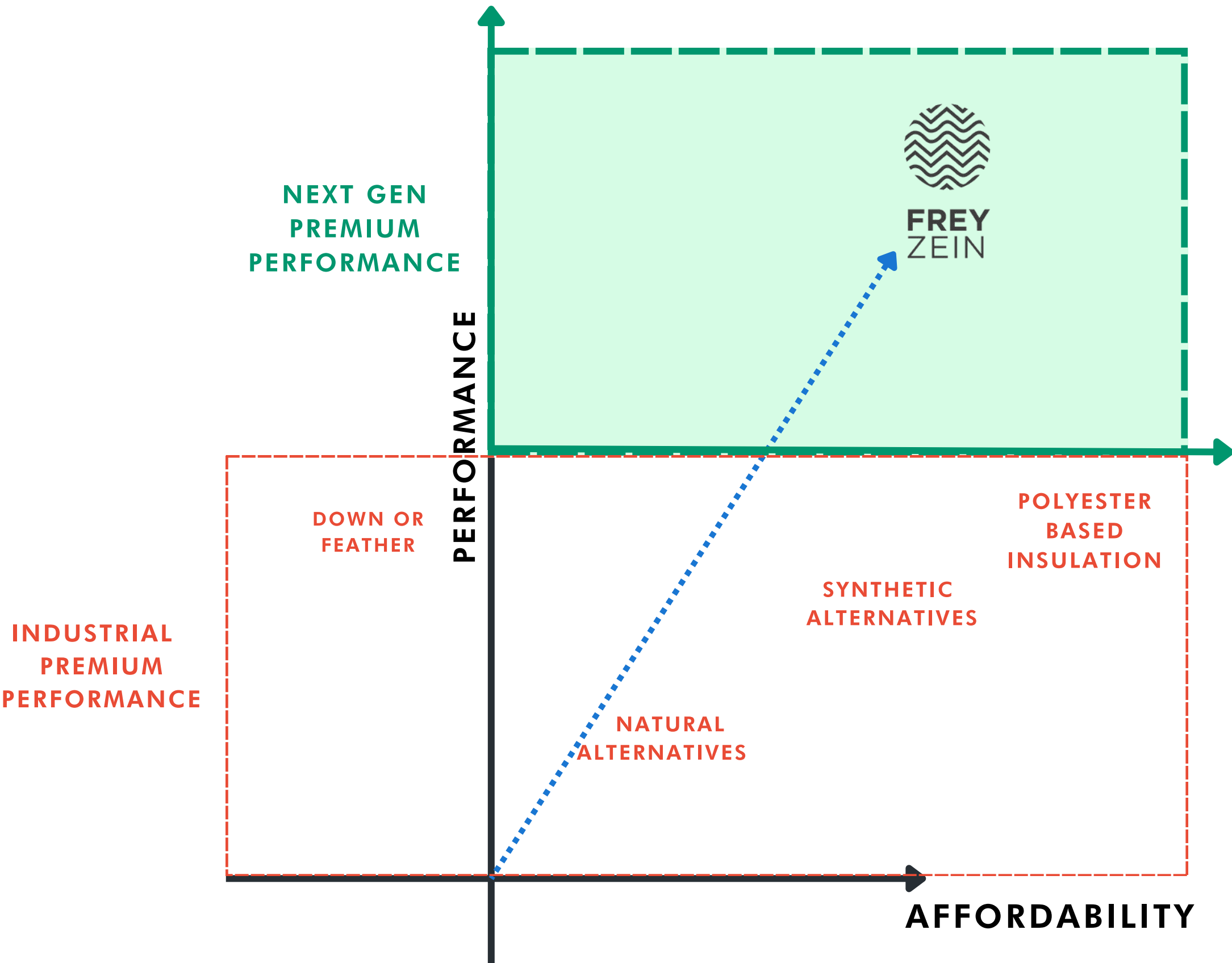
- Cellulosic Monomaterial
- Breathable & Water Proof
- Better Performance than Existing Bio-based Products

ideal for

- Outerwear
- Shoes
- Activewear
- Outdoor Textiles



COMPETITOR Matrix



FreyZein outperforms competitors:



Premium Performance



Circular Monomaterial



Sustainable Value Pricing

Want more performance?
It'll cost the Earth - literally

CLIMATE IMPACT Forecast

FreyZein underwent a climate impact self-assessment (CIF) for TerraDown™. Impact Forecast Netherlands certified us during our participation in the New European Bauhaus program funded and administered by the European Commission.

Comparison to conventional, petrochemical based solutions	Carbon footprint CO ₂ eq.
Impact per 1LM (1 linear meter of fabric - roll width 155cm)	-3.239 kg
Impact of 5000 times 1LM (1 linear meter of fabric - roll width 155cm)	-16t

Validation ID: IG0026 Date: 25-09-2024	FreyZein NextGen Textiles GmbH Mitigation project
Impact reduction potential	-16 tCO ₂ eq./year
Validity of the forecast	Valid ●
Reduction potential	Positive ●
Impact threshold	Significant ●



Impact reduction potential
-5kg CO₂ per jacket
produced with TerraDown™

Winning TEAM with an unfair ADVANTAGE



Sabrina Stacherl
CFO & Co-Founder



Enrico Cozzoni, PhD
Head of IP &
Commercialization



Legal, IP & Soft Funding

Dr. Cozzoni is responsible for some pivotal patents in the fashion industry, including one filed by Pangaia.



- Secured €4m in soft funding for FreyZein
- Published research articles: 78
- Patents filed: 7
- Funded projects: 50
- Lab -> GTM: 6



Solmaz Ghanbarnezhad
PhD, Senior Scientist



Barnaby Caven, PhD
CTO & Co-Founder



Tech & Research

Co-founding scientists on the team, Dr. Caven, Dr. Cozzoni and Dr. Ghanbarnezhad, have strong track records in materials science, nanotech, surface chemistry, and manufacturing engineering



- Combines 30+ years of entrepreneurial experience
- millions of products sold
- millions of Euros raised



Madeleine Müller
Product Dev &
Design, Founder
DÄYZE, DESA
Internazionale



Johannes Stefan
CCO, Ex Commercial
Director Worldwide
at Lenzing Group



Jan Karlsson
CEO & Co-Founder



Andreas Jaritz
CMO/CIO



Business & Scaling

CEO & Co-founder Karlsson scaled another sustainable venture selling over 35m products. Raising € 7m at his last venture, Jaritz adds rich experience the growing company.

New Team Members



Key MILESTONES

2020



**Company
Founded**
To
in Graz, Austria
JR&D/Business
Development

2021 - 2022



**Accelerators &
Business
Development**
To
Joined several
European Business
Development Programs

2023



**Funded by EU &
Austrian govt.**
To
Total € 1.1m secured
from Austrian
Funding & European
Union

2024



**DeepTech Lab &
first Business
Angel**
Horizon Europe
Project BioFibreLoop
with a total of € 7m in
consortial soft funding

2024



**Joining European
Institute of
Innovation and
Technology**
€ 900k secured from
Austrian Funding &
European Funding

2024



**Approval of FFG
Base Program**
A € 2.3m research and
development funding in
3 phases of which the 1st
phase got approved in
Sept. 24



Let's CONNECT

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