

HOHENSTEIN 

INSPIRING CONFIDENCE

OEKO-TEX® CERTIFICATES & PRODUCT LABELS

SHAPING A SUSTAINABLE FUTURE



ABOUT OEKO-TEX®

1992 Foundation, Hohenstein is founding member

17 independent research & testing institutes in Europe & Japan

100 offices worldwide, more than 60 countries

Institutes develop test methods & limit values for the OEKO-TEX® standards

35,058 OEKO-TEX® certificates & labels worldwide*

*Status 01/04/2022



OEKO-TEX® ECO PASSPORT

CERTIFICATION SYSTEM FOR CHEMICALS, COLOURANTS
& AUXILIARIES

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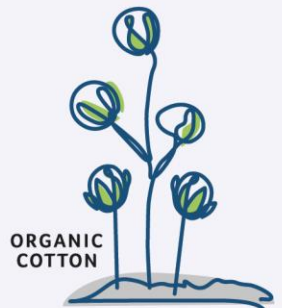


ECO
PASSPORT

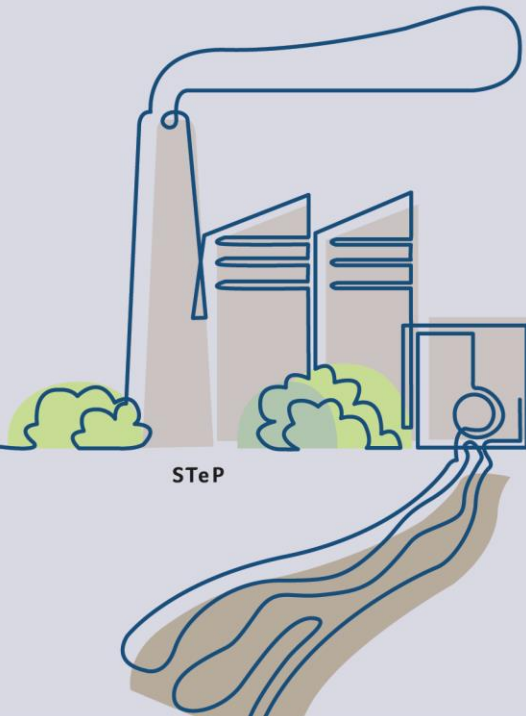


OEKO-TEX® ECO PASSPORT

INPUT CONTROL



PROCESS CONTROL



OUTPUT CONTROL



SUPPORTING TOOLS



OEKO-TEX® ECO PASSPORT

Is a comprehensive certification system for chemicals, colourants & auxiliary agents that ensures suitability for the sustainable production of textile/leather products optimised for human-ecological use.

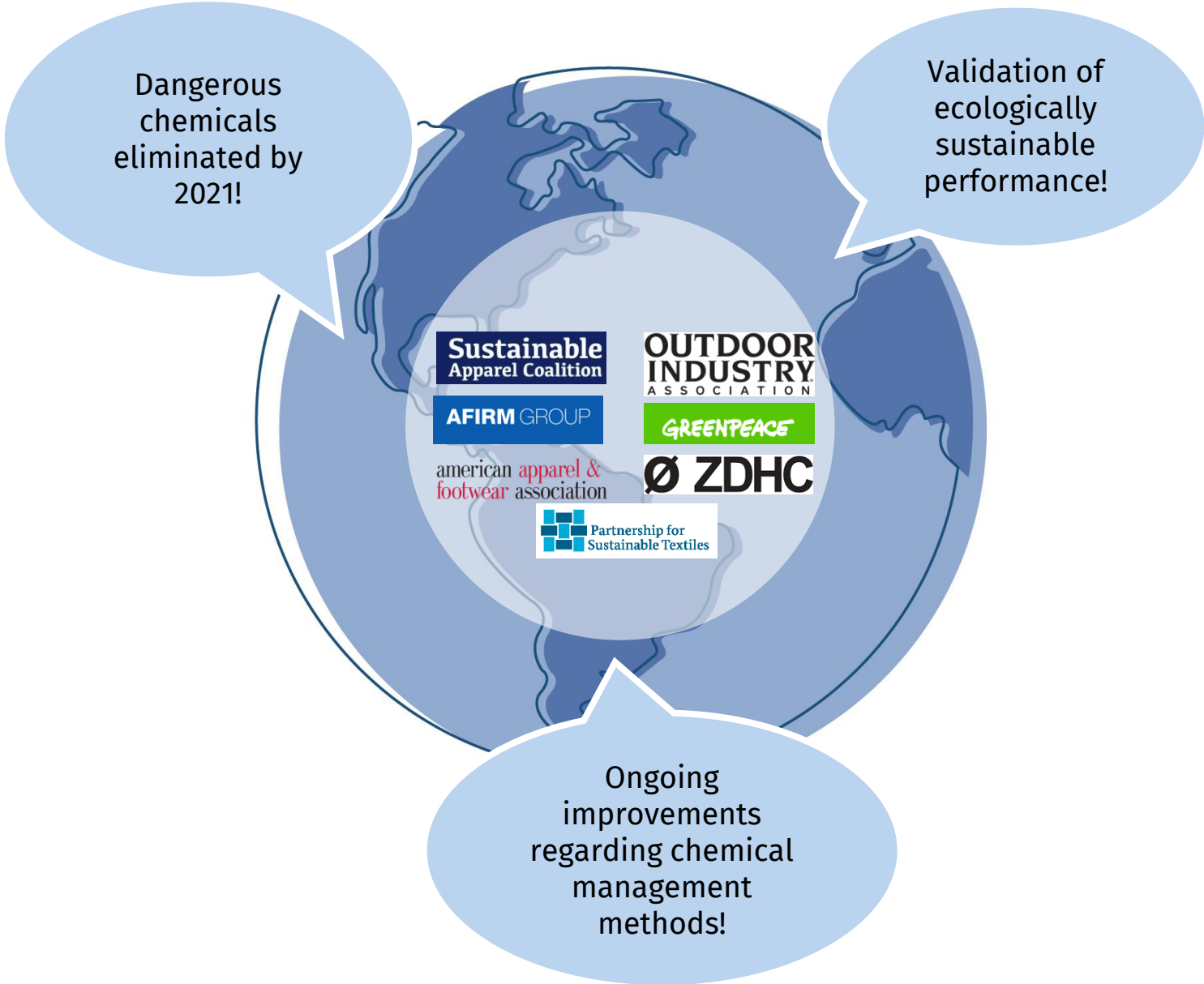


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OUR FAST PACED & CONSTANTLY CHANGING INDUSTRY

Industry groups, brand-name companies & NGOs demand more stringent and responsible chemicals management



RSL/MRSL TEST PROCEDURE

Transparent process to screen for harmful substances with a cost-efficient conformity comparison

Customers are informed quickly and efficiently about

- any non-compliance
- harmful ingredients

so that substitutions can be made before the analytical test

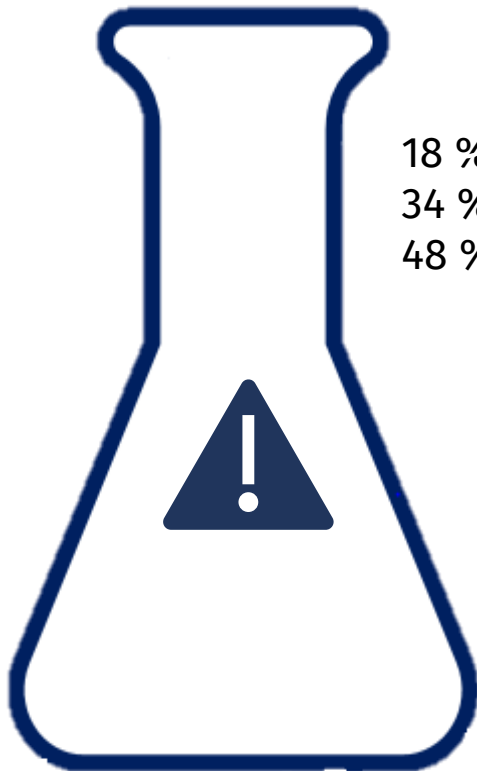
ANALYTICAL VERIFICATION

Analytical verifications in our laboratories ensure that certified chemical products do not contain any unwanted contaminants or by-products



THEORY vs. PRACTICE

FORMULA = THEORY



18 % "substance C"
34 % "substance B"
48 % "substance A"

LABORATORY RESULT = REALITY



1.0 %
"impurities, residues, by-products"
17.6 % "substance C"
33.6 % "substance B"
47.8 % "substance A"

ZDHC Chemicals to Zero



Chemicals to Zero



FOUNDATIONAL

Meets the requirements set out in the ZDHC MRSL 3.1 and MRSL Conformance Guidance V2.0 for Levels 1-3



PROGRESSIVE

Minimum ZDHC MRSL Conformance Level 2 criteria + AFIRM RSL (When applied as per the instructions of the chemical formulator)



ASPIRATIONAL

Minimum ZDHC MRSL Conformance Level 3 criteria + metrics related to sustainability attributes (water, energy efficiency, hazard assessment, waste/efficiency)



OEKO-TEX® MODULAR SYSTEM

YOUR BENEFIT

Quality assurance at every stage of the textile value chain

Cost savings through targeted use of pre-certificates

Simplified selection of components & suppliers with OEKO-TEX® certificate

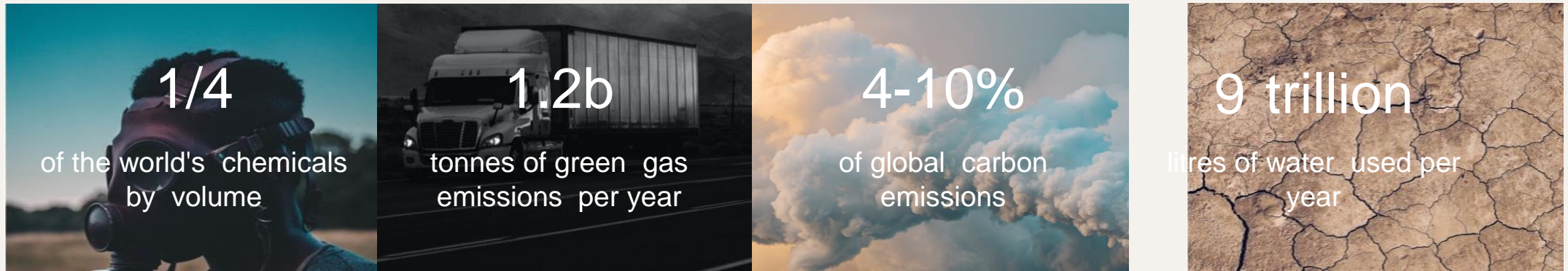


OEKO-TEX standards for input, process and output control
shaping a sustainable future for industrial dyeing in
collaboration with Colorifix

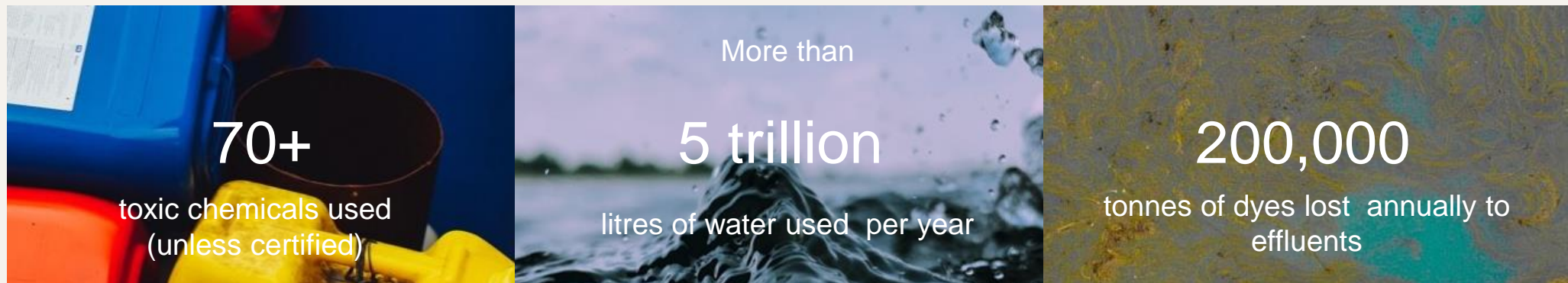
John Murphy & Adrian Butt

013

The textile industry is one of the world's most polluting industries



..and the dyeing process is the worst part



Our story

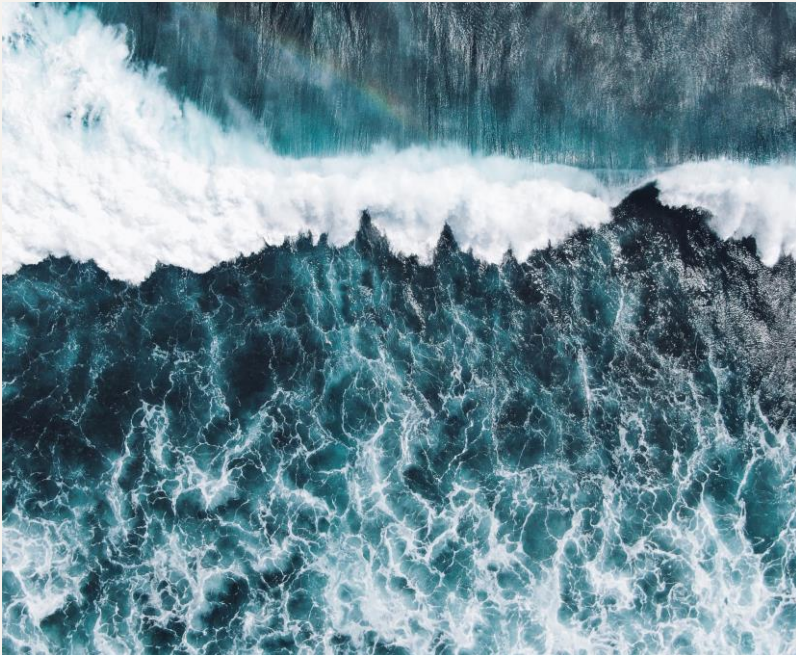
In 2014 two synthetic biologists, Jim Ajioka and Orr Yarkoni, were developing colour-changing biological sensors to monitor heavy metal contamination in drinking water. While testing these sensors in Nepal and Bangladesh, they began to learn about the enormous impact of the dyeing industry on water and human health.



→ They realised, there has to be a better way.

015

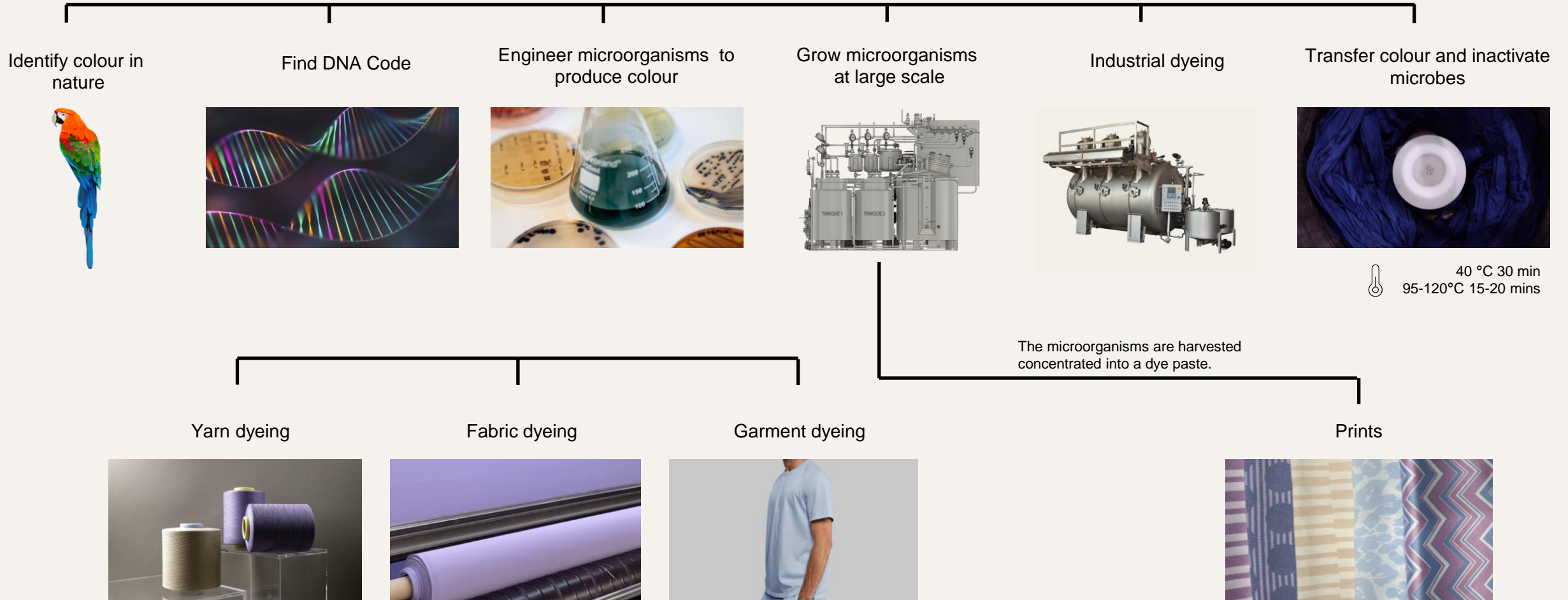
Colorifix is the **first company** to use an entirely biological process to produce, deposit, and fix pigments onto textiles.



Our mission is to transform industrial dyeing into an environmentally friendly, socially responsible, and economically viable process.

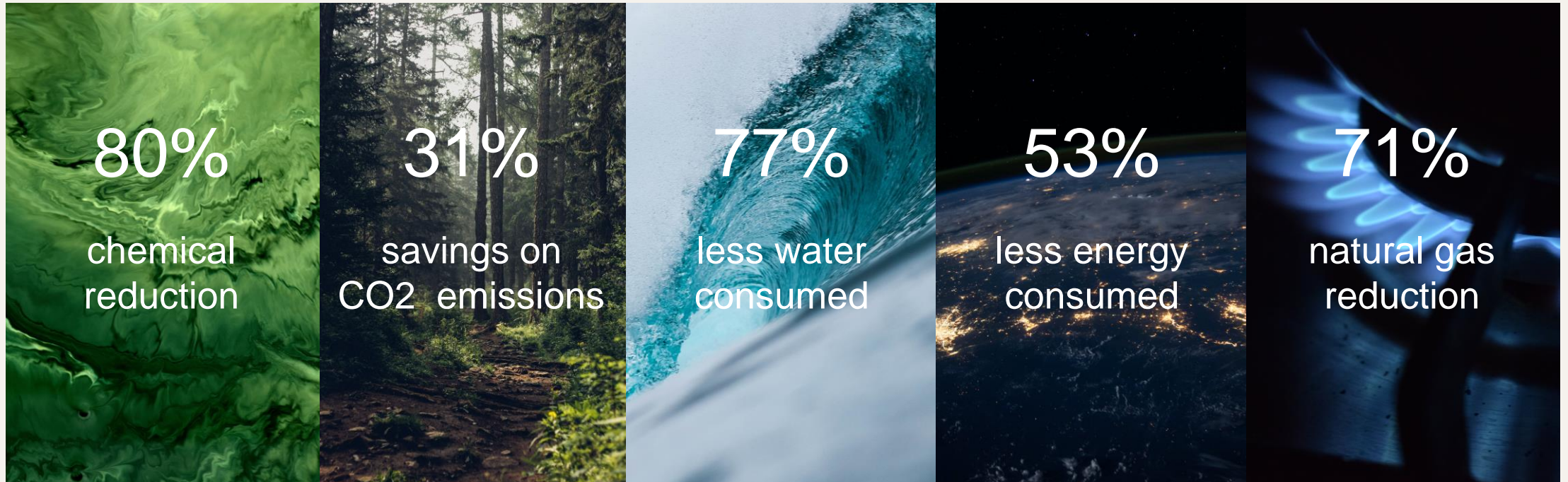
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The first entirely biological process for dyeing textiles



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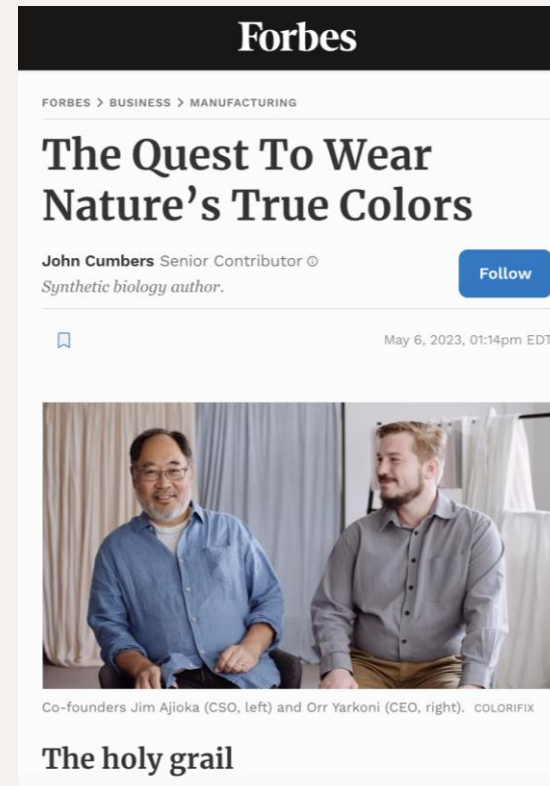
Saving water, energy and carbon emissions at every stage of the process



Our impact figures above belong to our latest third-party life cycle assessment performed for two different dyeing processes: conventional and Colorifix®. The study included the two stages: dyeing and final washes, performed on 1 Kg of knit jersey 52% recycled cotton 48% recycled polyester.

018

We have launched products with world-leading brands



Working with Hohenstein: Eco Passport

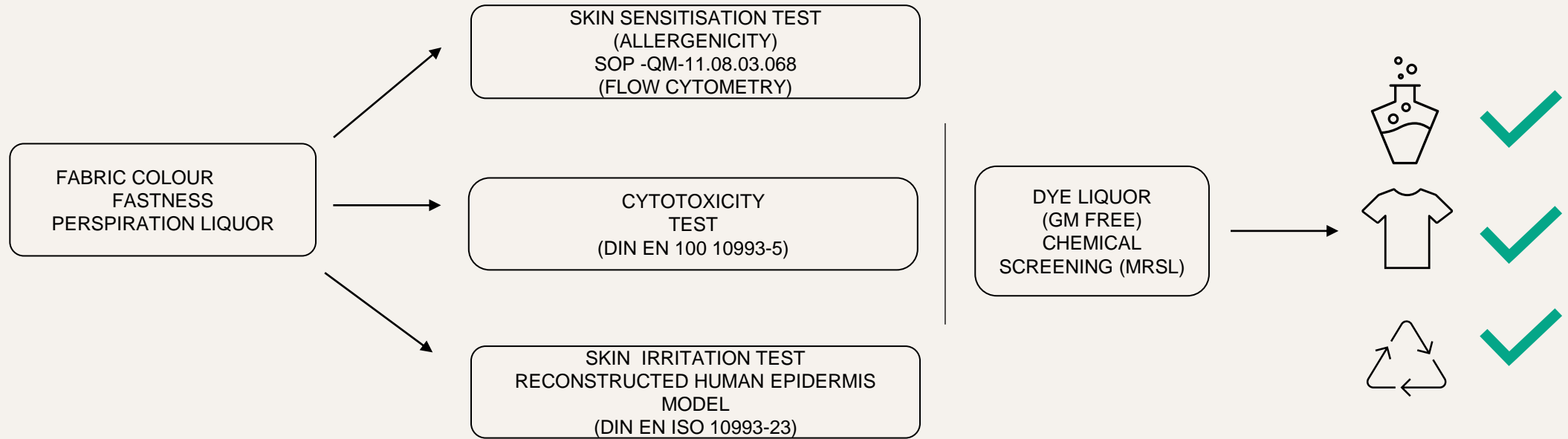
- Colorifix and Hohenstein developed the first biological dyeing testing methodology. This required innovative thinking on both sides as well as the application of robust testing methodology to integrate it successfully into the certification scheme.
- This testing methodology is an integral part of Colorifix pigment to product process.
- It has helped build confidence in the Colorifix brand
- We turn to Hohenstein for advice on candidate products in the pipeline for development
- Fundamentally we share the same goal – to find sustainable solutions to a highly polluting industry based on data and science.



**ECO
PASSPORT**

020

Setting a new standard in the industry



021

We're already implementing our technology globally

