



The bluesign® Standard, The Holistic Approach for Brands and Textile Manufacturer

Performance Days, November 2010

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- 
1. bluesign vision
 2. textile production
 3. bluesign standard
 4. bluesign applications
 5. bluesign benefits
 6. how to start with bluesign

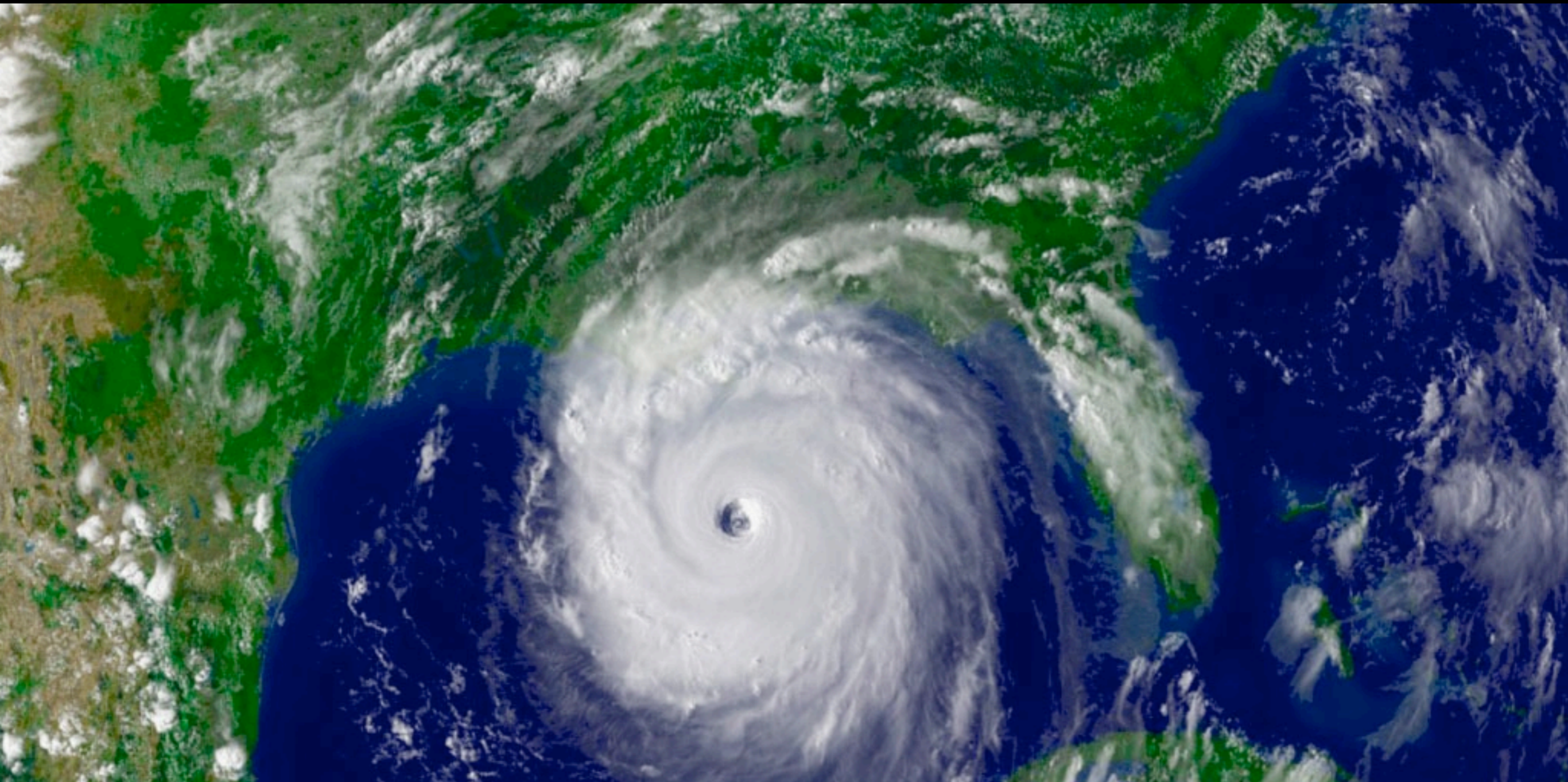
Today's
AGENDA

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Resource consumption
TIME FOR CHANGE

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Environmental impact
FOCUS ON OUR PLANET

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Environmental impact:
FOCUS ON OUR PLANET





Environmental impact: today:
RE-IMPORT OF TOXIC MATERIAL



A person is holding a white sign with the text "so green®" in green. The background is a blurred retail environment with green clothing items hanging on a rack. A person with long blonde hair is visible in the foreground, looking towards the sign.

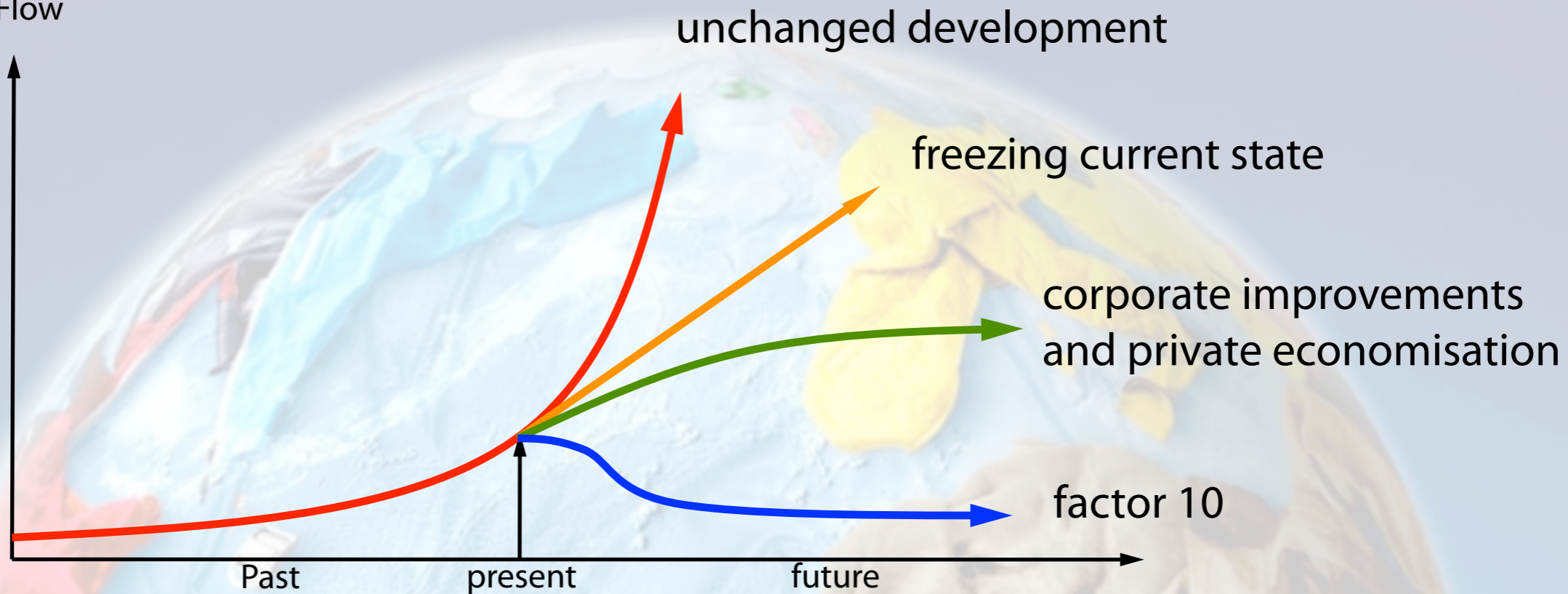
so
green®

Today's focus:

OUTPUT TESTING, CONSUMER CONVENIENCE

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Global Mass Flow




Source: „The Earth“; Prof. Friedrich Schmidt-Bleek, Factor 10 Institute, F 83660 Carnoules

Development scenarios
GLOBAL MASS FLOW

- 
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Today's
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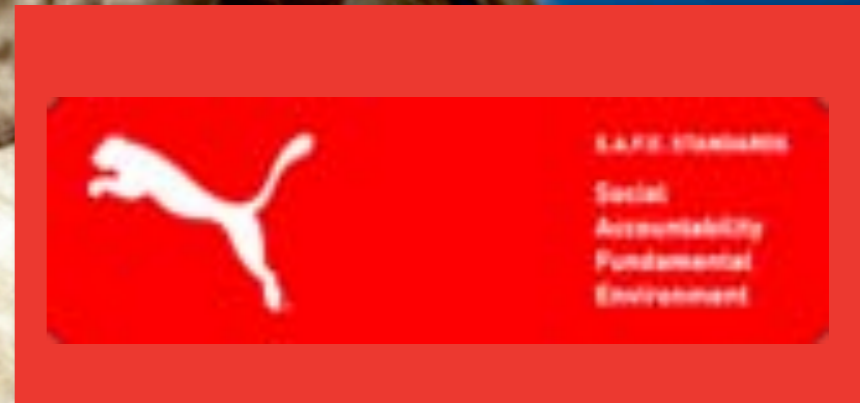
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Regulations in textile manufacturing becomes more and more complex.
Too many Restricted Substances Lists (RSLs) & Eco Labels, and legislation such as the new “Registration, Evaluation, Authorisation and Restriction of Chemicals” (REACH)

Textile production
CURRENT SITUATION

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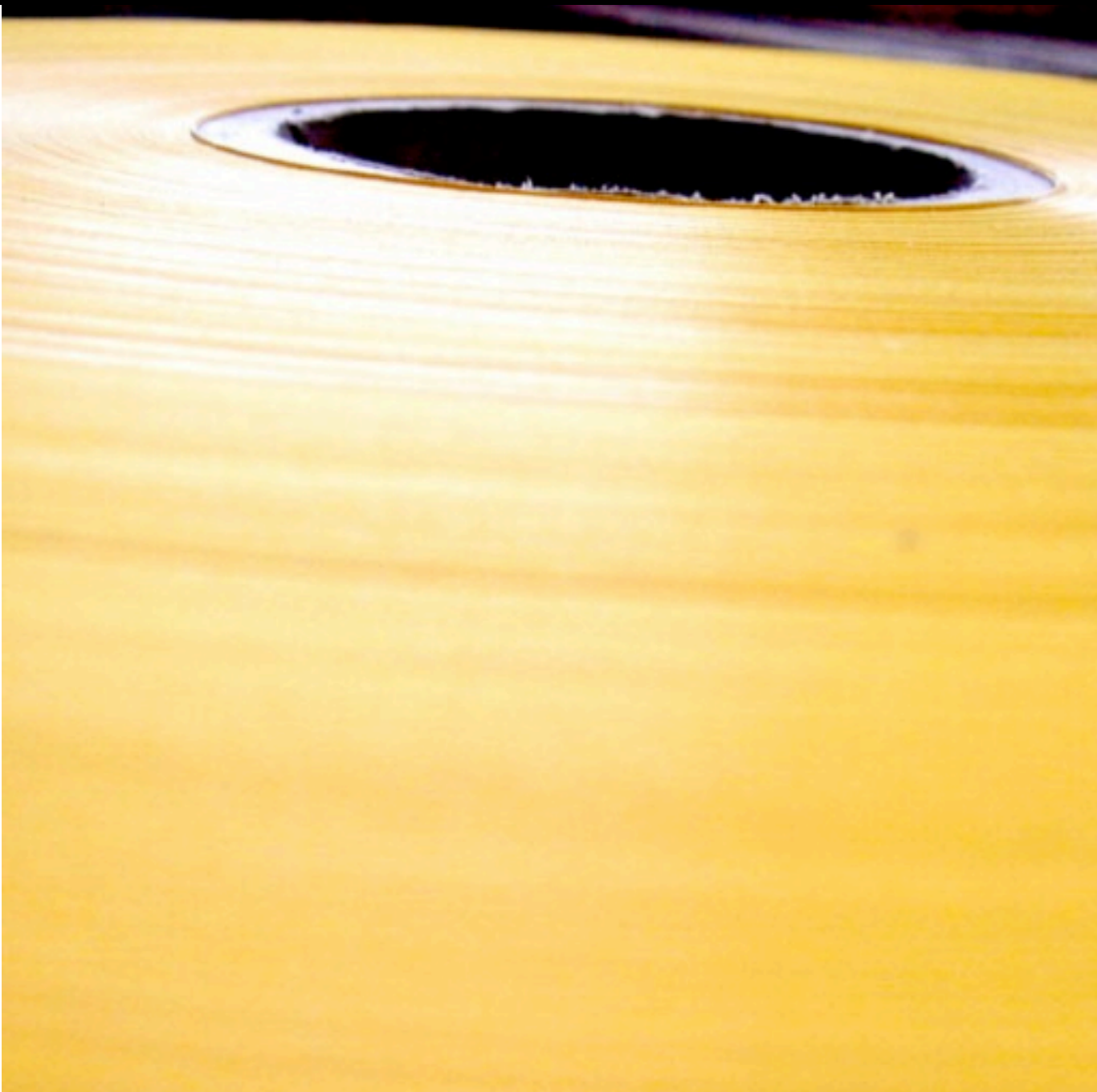


Textile production CURRENT SITUATION





Textile production
BLACK HOLE



Chemical Consumption Synthetics
110 - 820 g/kg TEXTILE



Chemical Consumption Cotton
350 - 1,500 g/kg TEXTILE



For finishing of 1 kilogramme textile
UP TO 700 LITRES of FRESH WATER



The annual water usage of one big brand demands the water of
2,000 SMALL LAKES



What you don't see at the end-product
OCCUPATIONAL HEALTH & SAFETY



What you don't see at the end-product
WATER EMISSION



What you don't see at the end-product
AIR EMISSION



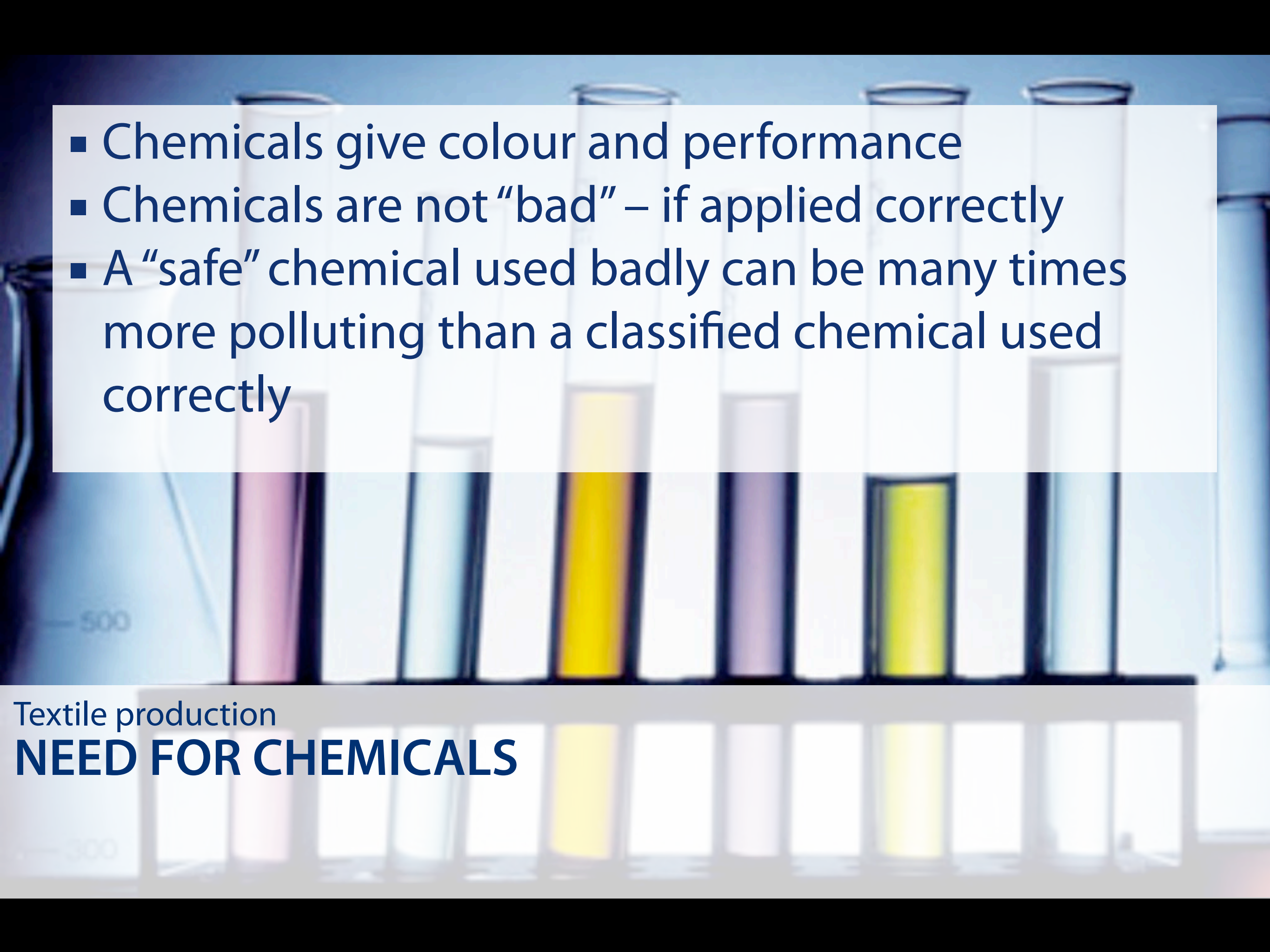
What you don't see at the end-product
WASTE MANAGEMENT



What you don't see at the end-product
END-OF-PIPE SITUATION



What you don't see at the end-product
RESOURCE EFFICIENCY IN PROCESSING

- 
- Chemicals give colour and performance
 - Chemicals are not “bad” – if applied correctly
 - A “safe” chemical used badly can be many times more polluting than a classified chemical used correctly

Textile production

NEED FOR CHEMICALS

“If you don’t know, you don’t care!”



What you must know

HOW IS YOUR PRODUCT MADE?

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Today's
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Tackle the challenge at its roots. Input control instead of only testing at the end. All resources on the input side from raw materials, water, energy, and chemicals are managed with a sophisticated "Input Stream Management" System.

Tackle the problem at its roots

INPUT STREAM MANAGEMENT

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**Chemical
Suppliers**



**Textile
Manufacturers**

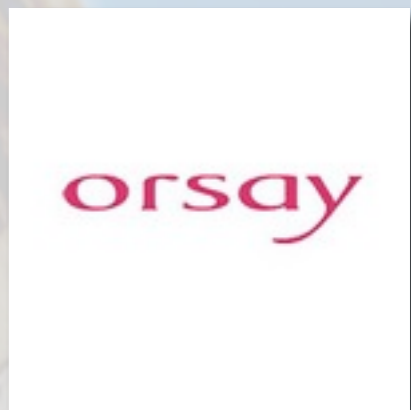
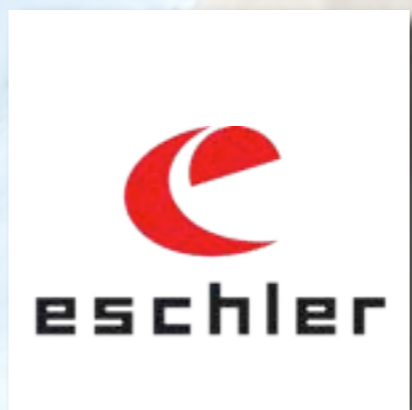
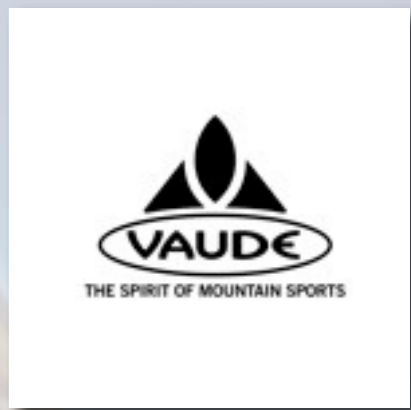


**Brands &
Retailers**

Bringing together the entire textile manufacturing chain to jointly reduce the environmental footprint of the textile and related industry.

Transparency within the entire supply chain
HOLISTIC APPROACH

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bluesign® system partners
OVERVIEW





The bluesign® standard
BUILT AROUND FIVE PRINCIPLES

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1. Resource Productivity

- Use of eco-efficient products to achieve best performance with optimised resource consumption and minimum air and water emissions
- Ecological footprint: minimised energy and material input per kg of textile product

The bluesign® standard
BUILT AROUND FIVE PRINCIPLES

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2. Consumer Safety

- Carcinogenic substances
- Mutagenic substances
- Neurotoxic substances
- Endocrine substances
- Sensitising and irritating substances
- And others

The bluesign® standard
BUILT AROUND FIVE PRINCIPLES

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3. Air Emission

- Emission factor (e-factor)
- Substance emission factor (s-factor)
- Recipe calculation based on e-factors leads to Volatile Organic Carbon (VOC) reduction

The bluesign® standard
BUILT AROUND FIVE PRINCIPLES

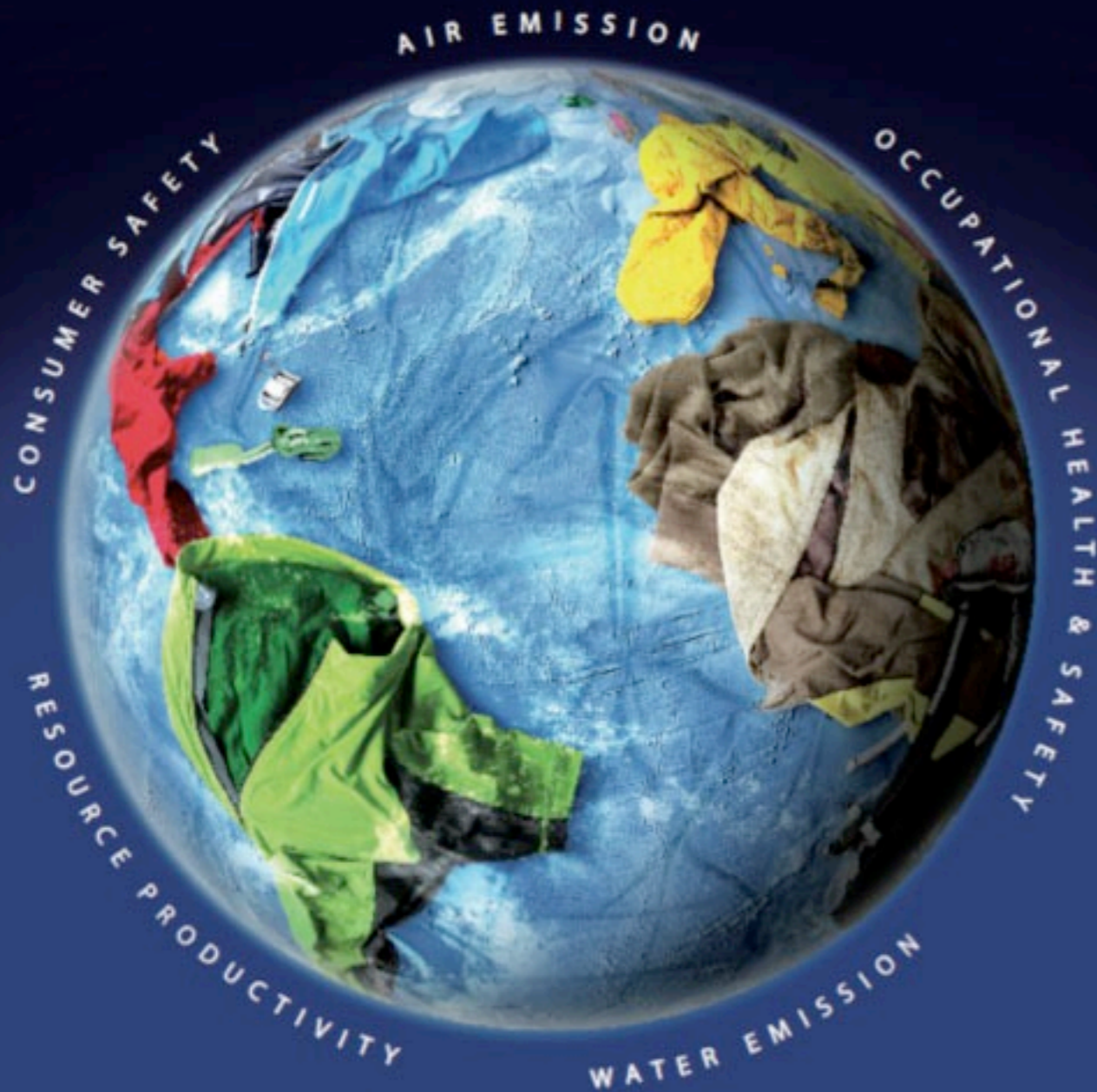


4. Occupational Health & Safety

- Protection of the worker from exposure to dangerous chemicals
- Evaporation at large surfaces at stenter, printing, and coating applications
- Handling at the dyeing machine at high temperatures (batching tank)
- Preparing, measuring, mixing, and delivering of chemicals

The bluesign® standard
BUILT AROUND FIVE PRINCIPLES

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5. Water Emission

- Biodegradability, bioelimination
- Fish-, bacteria-, daphnia-, algae toxicity
- COD, BOD, TOC, AOX
- Aliphatic hydrocarbons, sulfate, phosphate a.o.
- ARS according TEGEWA Class I-III
- Heavy metals
- And others

The bluesign® standard
BUILT AROUND FIVE PRINCIPLES

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Various “Restricted Substance Lists”

AAFA, Nike, Levi’s, New Balance, R.E.I., Columbia, adidas, PUMA, H&M, C&A, M&S, IKEA, Coats and others

REACH

- Concentration of „Substances of Very High Concern“ (SVHC) in bluesign® approved fabrics is smaller than 0.1%
- No reporting requirement according to article 33 REACH
- Notification according to article 2 REACH does not apply

Current list of SVHC on ECHA website

http://echa.europa.eu/chem_data/candidate_list_table_en.asp

The bluesign® standard
REACH and various RSL`s are complied

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For each substance that is assessed by bluesign technologies ag, a comprehensive set of data is reviewed including at least the following sources:

GESTIS (Germany)

GESTIS Occupational Health

DFG (Germany)

TRGS 900 (Germany)

TRGS 905 (Germany)

ESIS (European Commission)

IUCLID (European Commission)

RAR's (European Commission)

NIOSH (US)

TCPP (US)

OEHHA (US-CEPA)

IRIS (US-EPA)

OECD-Screening Information Data Sets (SIDS)

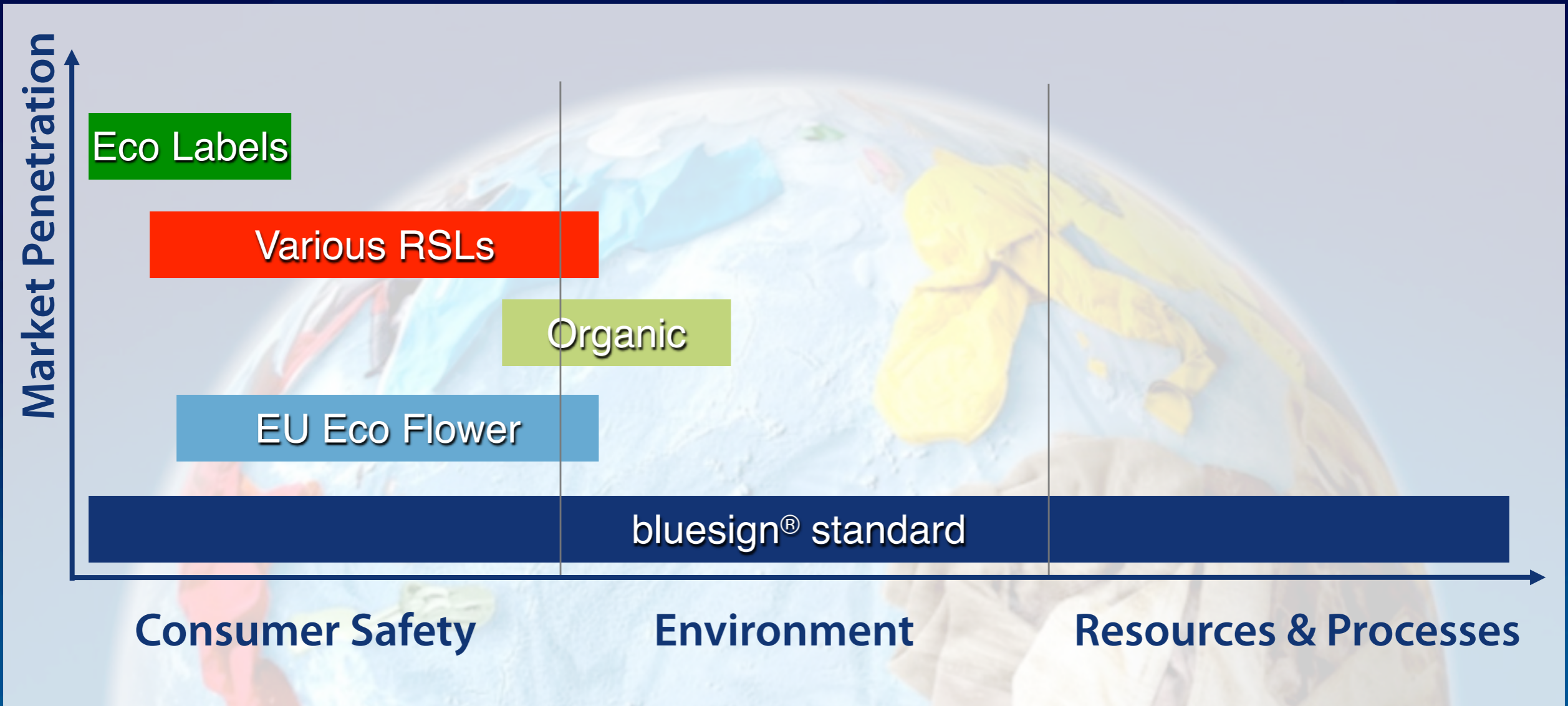
Concise International Chemical Assessment Documents (CICADs)

International Agency for Research on Cancer (IARC)

International Chemical Safety Cards (ICSC)

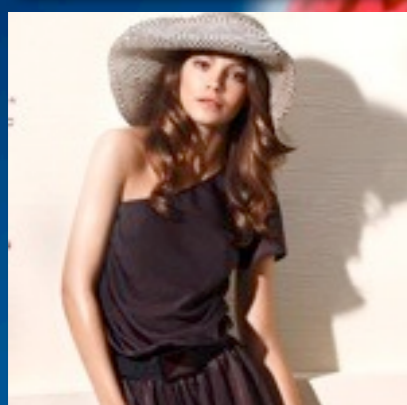
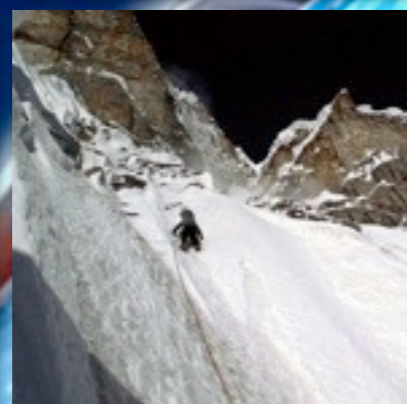
**The bluesign® standard
REACH and various RSL`s are complied**

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Qualitative comparison
HOLISTIC APPROACH





- No compromise in
 - functionality
 - quality
 - design
- Solution provider with technical service
- From the industry – for the industry
- Chemical rating system
- Best Available Technology (BAT)
- Input Stream Management system
- Resource optimisation concept
- Holistic approach includes all types of textiles
- On-site inspections worldwide


The bluesign® standard
SET-UP

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- 
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The applications provide the textile value chain with the necessary know-how and support in EHS management for the daily practice.

bluesign® applications

PRACTICAL TOOLS FOR ALL LEVELS

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The bluesign® bluetool application for chemical suppliers

The science gateway to homologate chemical products.

- Access an independent, expert third party to evaluate and register your chemical products
- bluesign® approved chemical products comply with global RSLs, eco labels, and legislations
- Get your bluesign® approved chemical products published on the bluesign® bluefinder



“We have to re-learn that quality is more important than quantity.”

Peter Johnson, Product EHS Dept. Product Steward, Huntsman



Energy

Water

Raw
Material

Production

End
Product

Air
Emission

Waste
Waste Water

bluesign® screening solution provider

- Full transparency in the production
- Breaking down complex EHS-issues to a manageable level
- Indication of resources and cost saving potentials compared to “Best Available Technology”
- Safety for manufacturers, retailers and brands, consumers, and the environment

“The bluesign® standard is the best insurance for tomorrow’s products.”

Detlef Fischer, Vice President, bluesign technologies ag

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The bluesign® bluefinder application for textile manufacturers

Advanced search engine for bluesign® approved chemical products.

- Optimise chemical sourcing regarding consumer safety using the bluesign® bluefinder
- The bluesign® bluefinder provides comprehensive information about sustainable production
- Get access to manufacturers of bluesign® approved chemicals, dyestuffs, and auxiliaries

“Partnering with bluesign to support their efforts to raise industry standards for sustainability makes sense for our business, our customers and the environment.”

Andy Vecchione, President, Polartec





The bluesign® blueguide application for brands and retailers

Comprehensive database for bluesign® certified textiles.

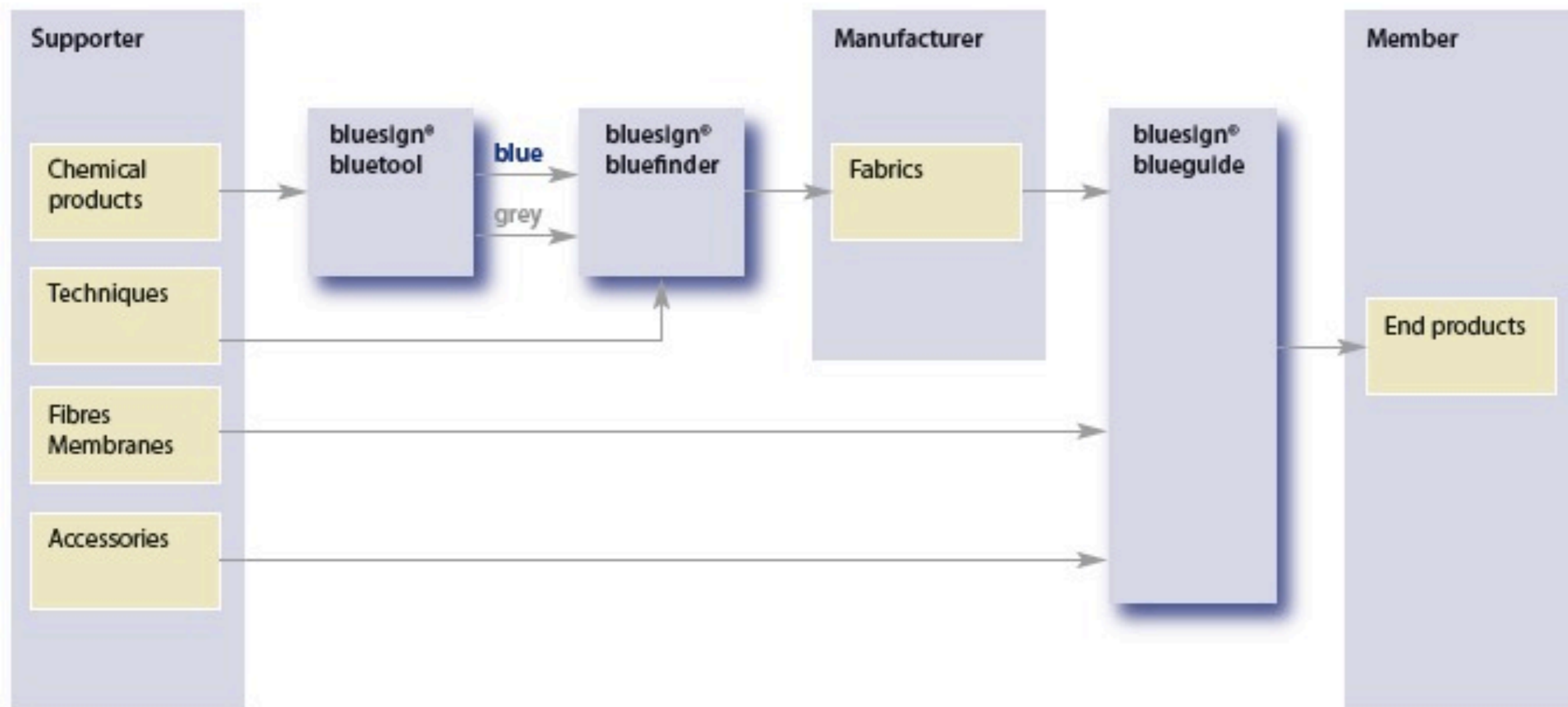
- Access to a comprehensive sourcing instrument for sustainable textiles, accessories, and trims
- Get extensive information about environment, health, and safety issues
- Access to manufacturers of bluesign® approved fabrics



“Bring more transparency into the supply chain.”

Jill Dumain, Director of Environmental Strategy, Patagonia





bluesign® applications


PRACTICAL TOOLS FOR ALL LEVELS

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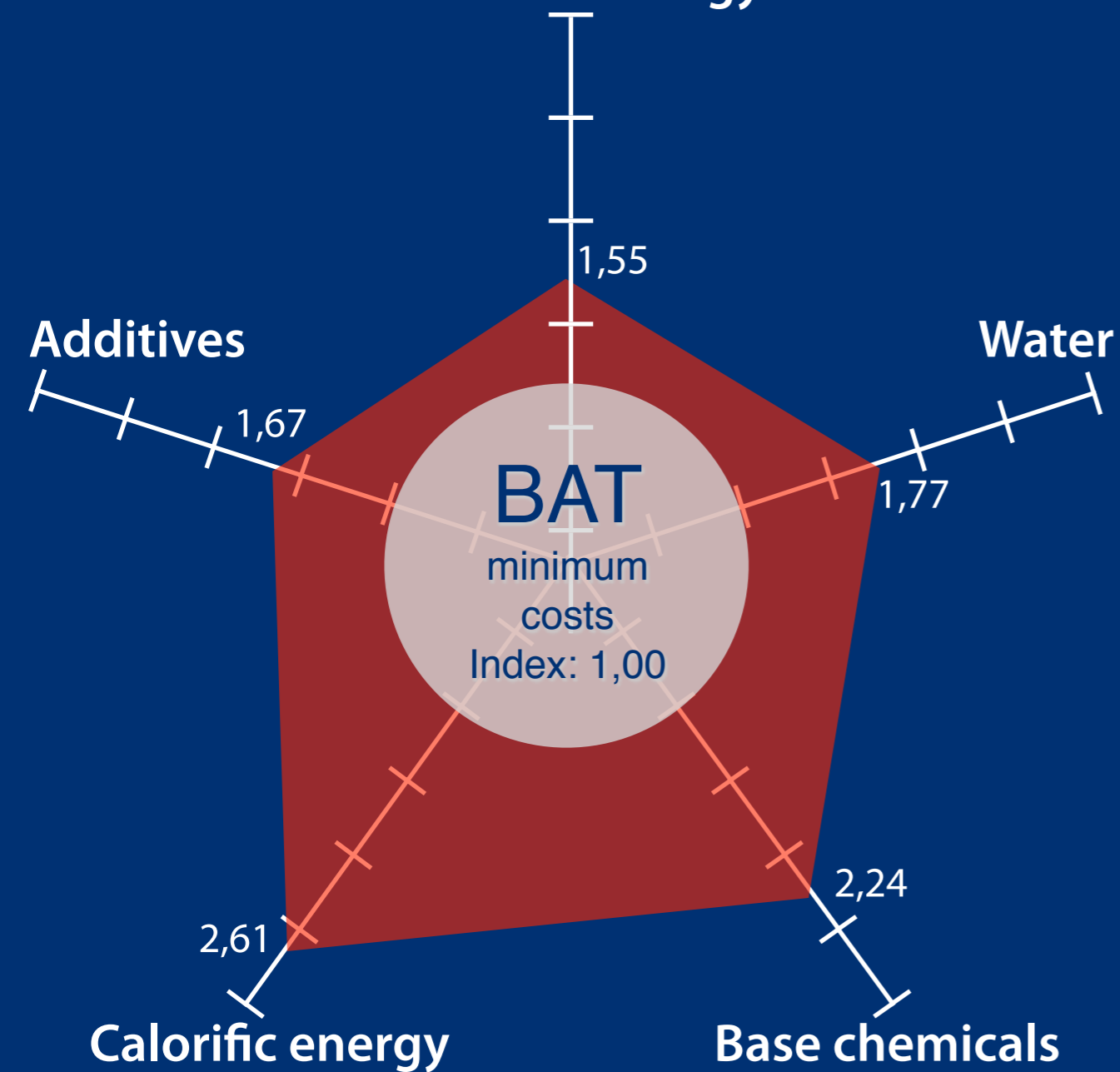


The bluesign® standard is the most efficient way to guarantee compliance with the newest EHS (Environment, Health, and Safety) standards, without compromising functionality, quality, or design of your products.

bluesign® benefits
MOST EFFICIENT WAY

bluesign®

Electrical Energy



The bluesign screening demonstrates cost savings based on optimisation of resources.

- More than 95% of the time, the ROI is less than 3 months.
- In this example, the cost savings equaled 897,000 € annually.
- The bluesign approach is to reduce the waste of resources and costs in each step of the process.

Resource Management
COST INFLATION FACTOR

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“In the 1st year of our membership with bluesign technologies, we were able to reduce:

- water by 40%
- energy by 20%
- chemicals in the waste water by 53%

leading to a cost reduction of 1.44 million USD per year!

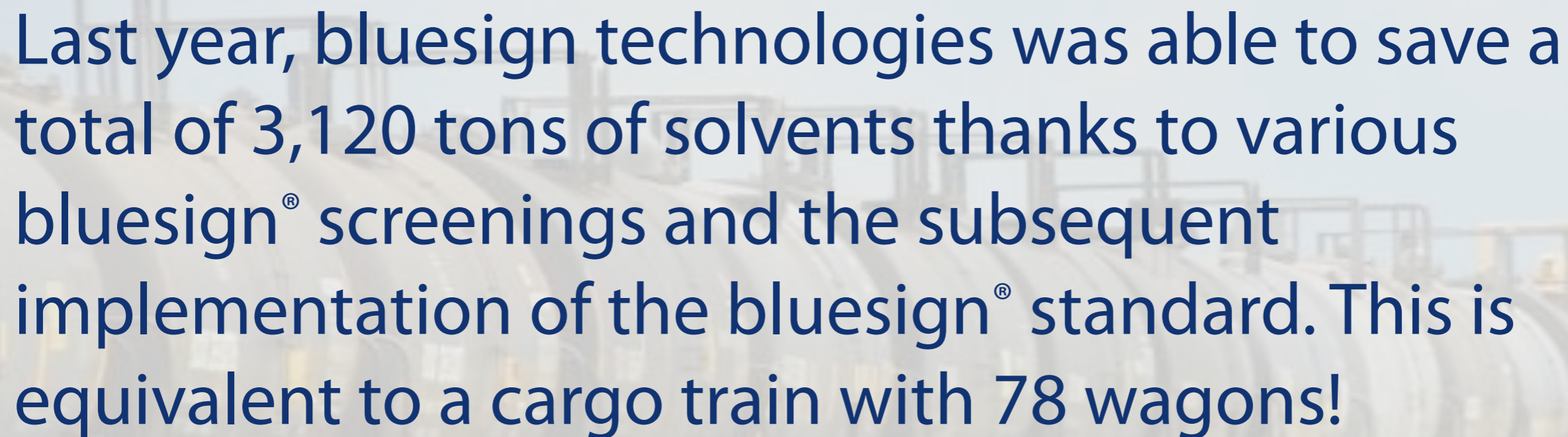
The bluesign[®] standard combines eco-friendliness and economic benefits.”

Ching-Lai Yeh, President, Everest Textile Co., Ltd. Taiwan

bluesign[®] benefits

EXPERIENCE OF MANUFACTURER

bluesign[®]



Last year, bluesign technologies was able to save a total of 3,120 tons of solvents thanks to various bluesign[®] screenings and the subsequent implementation of the bluesign[®] standard. This is equivalent to a cargo train with 78 wagons!



Resource management

RESULT ON MANUFACTURER'S SITE

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Brands & Retailers

how to become a Member

1. evaluation of company (Questionair)
2. become a bluesign member
3. start working with the blueguide to use "bluesign approved fabrics"
4. encourage your manufactures to become a bluesign system partner

Only brands have the power of changing their supply chain towards sustainability.



We are encouraging our supply chain to adopt the bluesign standard to meet our performance but also our environmental expectations as well.

Letitia Webster, Director Corporate Sustainability, The North Face Inc.

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Benefits for Brands & Retailers:

- Access to bluesign® approved fabrics
- Get extensive information about environment, health and safety issues
- Sourcing instrument for sustainable textiles, accessories, and trims
- Verification of company status and certified textile products
- More safety by transparency and trust
- Find textile manufacturers and suppliers

bluesign® benefits
Brands & Retailers

bluesign®



Textile Manufacturer

how to become a system partner

1. Evaluation of company (Questionair)
2. On-site Screening
3. Receive Report with recommendations
4. become a bluesign system partner
5. Implementation of the recommendations
6. Start working with the bluefinder to use "bluesign approved ingredients "
7. Encourage other brands & manufactures to become a bluesign system partner

bluesign® benefits

EXPERIENCE OF MANUFACTURER

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Benefits for Textile Manufacturer:

- Transparency in the entire textile value chain
- Breaking down complex EHS-issues to a manageable level
- Managing chemical sourcing regarding consumer safety
- Fulfil various RSLs, eco labels, and legislations such as REACH
- Access to bluesign® approved chemicals, dyestuffs, and auxiliaries
- Find suppliers and brands / retailers

bluesign® benefits
Manufacturer

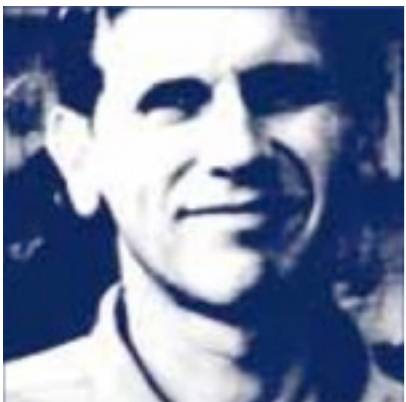
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The bluesign® community: sustainability is a team sport

Inspire chemical suppliers, textile manufacturers, brands and retailers to work today for a better tomorrow.

“The bluesign® standard is the gold standard.”



Kevin Myette, Director of Product Integrity, REI

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“If you know, you care!”



THANK YOU!

bluesign technologies ag
EMPA Building
Lerchenfeldstrasse 5
CH-9014 St.Gallen
Switzerland
www.bluesign.com

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