

Nairobi, Kenya - Sep. 7 - 9, 2018



Supply Chains & Business Models in Times of Rapid Change available Presentations September 9, 2018

Sunday (September 9)

Fibres & Applications (F&A) Committee Meeting

<u>Filament Cotton Yarn from Recycled Cotton</u> **Gerrit Bouwhuis,** Saxion – University Applied Science, Netherlands

Digital Printing & Finishing Marc van Parys, UNITEX – TexZeppelin, Belgium

5th General Session: Retail / E-Commerce

Embracing Change: How Fashion Retailer bonprix Fulfils Today's Customer Expectations Rien Jansen, bonprix (Otto Group), Germany

6th General Session: ITMF's Audit Initiative

Update & Progress Report Karim Shafei, Gherzi, Switzerland Matthijs Crietee, IAF, Netherlands

<u>The Role and Objectives of the SLCP</u> Janet Mensink, Social & Labour Convergence Project – Netherlands

<u>A View from a Retailer</u> **Caner Soytas,** Nike, Turkey

<u>A View from a Manufacturer</u> **Helen Chen,** Esquel China/Beijing Office

7th General Session: Green Economy

Driving Sutainability – A Value Chain Responsibility James Carnahan, Archroma, Singapore

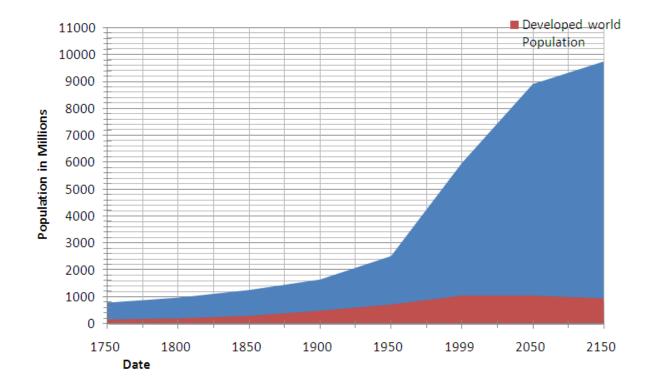
SAJCELL

Domestic cotton waste based virgin fiber

Gerrit Bouwhuis September 9th, 2018



World Population Growth



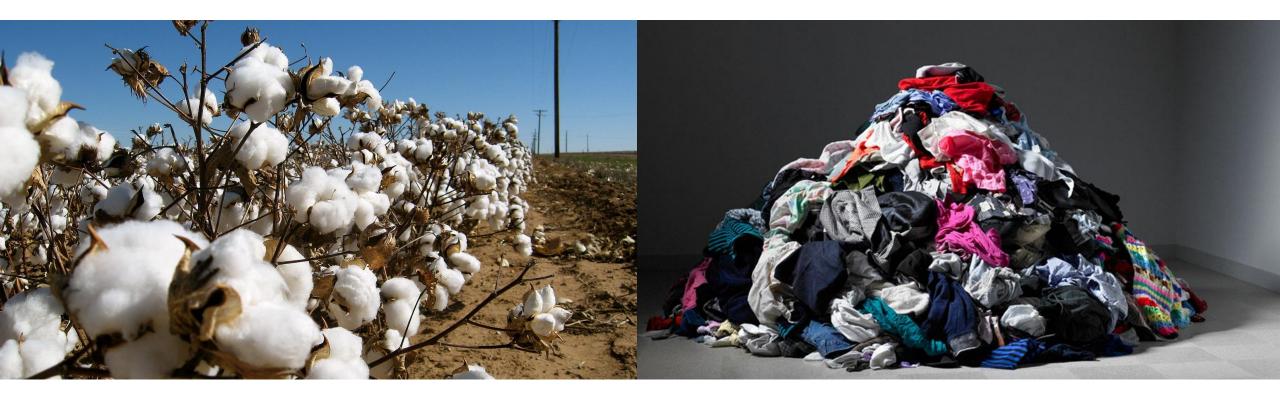
Developing World

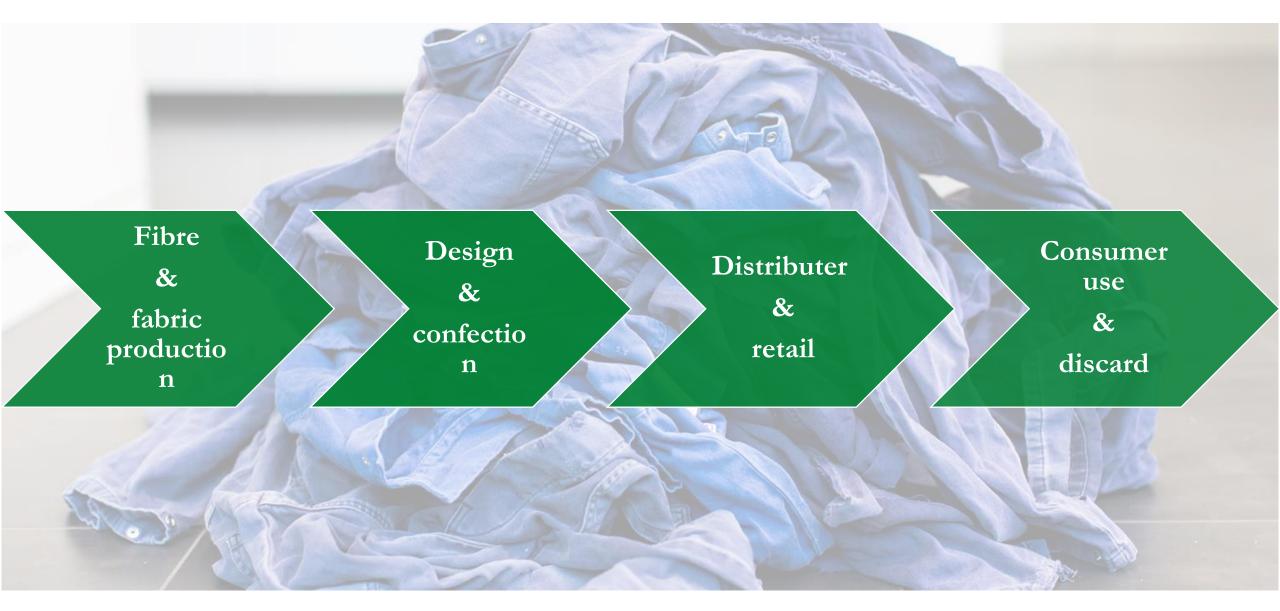
Prosperity +95% in 2050

Cotton stable around 25 mio ton

Regenerated cellulose: 50% up over last 10 years



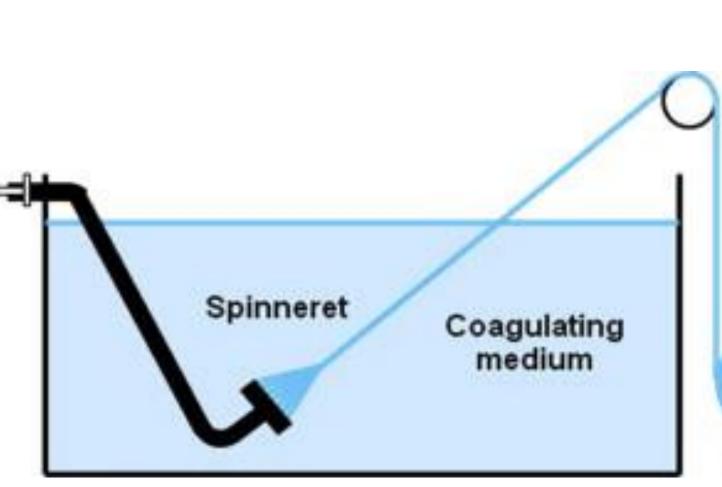








Feed stock preparation

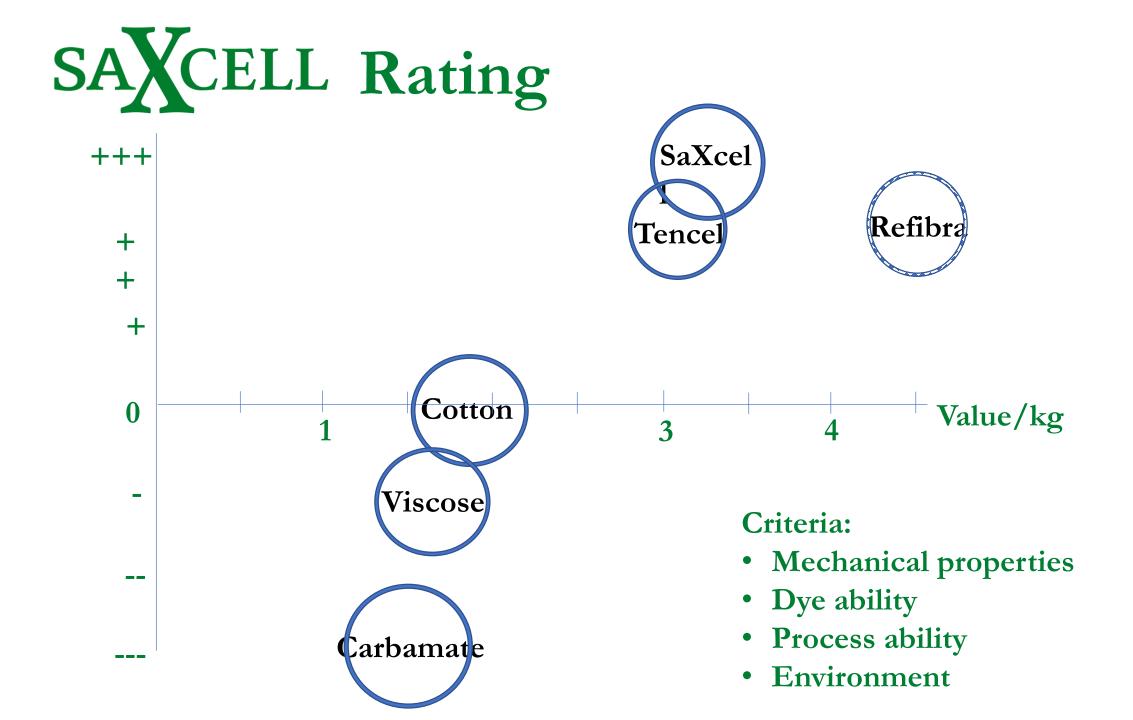


Spinning





Products





Technical Textiles

Single fiber and blends

Household textiles

Apparel

Interior

Collaboration with industry:

production batch 5 ton

design production facilities/ economics and environmental

time to market: 4 years

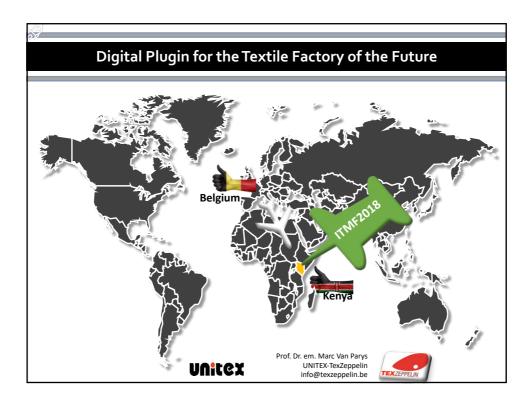




Many thanks to our: students, researchers and partners

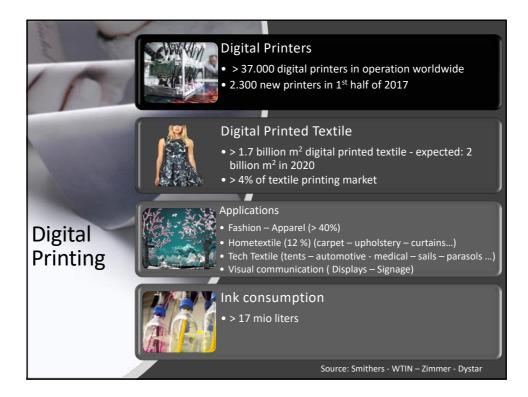


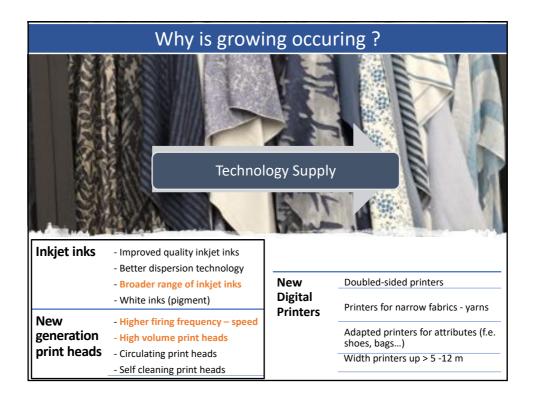


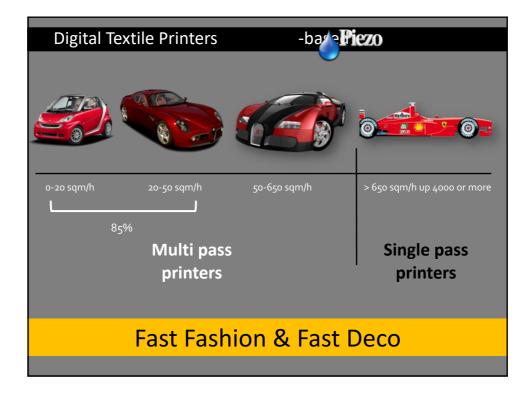


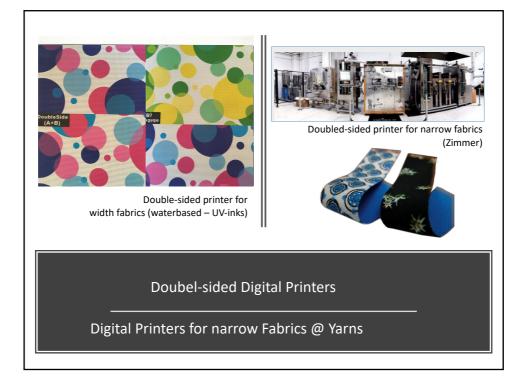




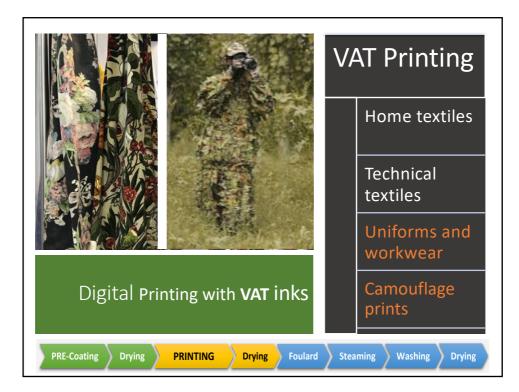




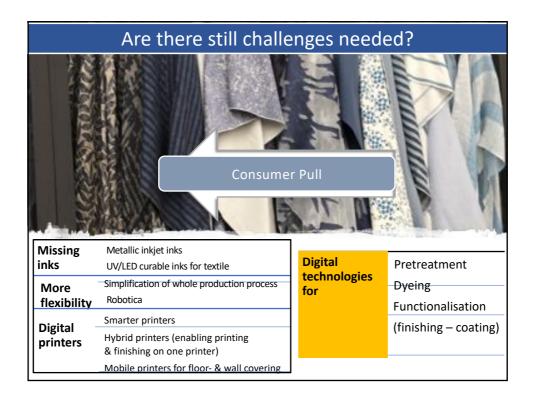


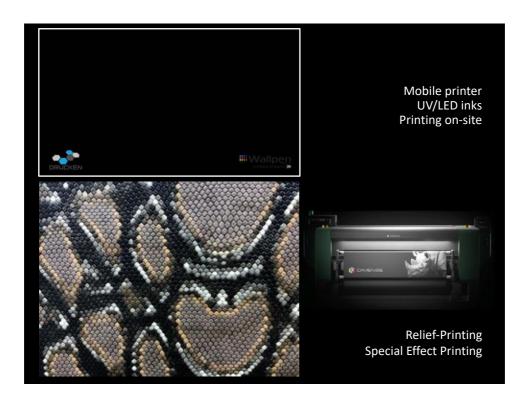


Waterborne Digital Inks: The selection is dictated by the textile material and the end-use (desired properties)					
Ink type	Fibre type	Chemical PTP- treatment	Light fastness	Wash fastness	Rub fastness
Reactive inks	CO – Vi - PA	yes	+/-	++	++
Acid inks	PA – WO - Silk	yes	++	++	++
Disperse direct inks	PES	yes	++	++	++
Sublimation inks	PES	no	+	+ (+)	+
Pigment inks	All fibres, incl. blends	yes	+++	+	+/- (wet)
Vat inks	CO - Vi	yes	+++	+++	+++
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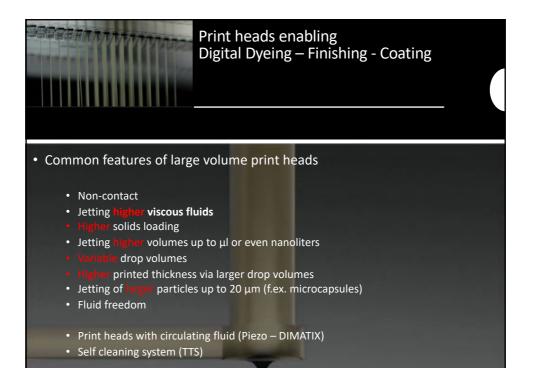


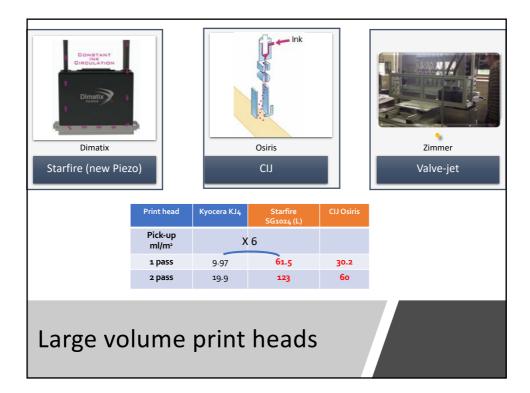


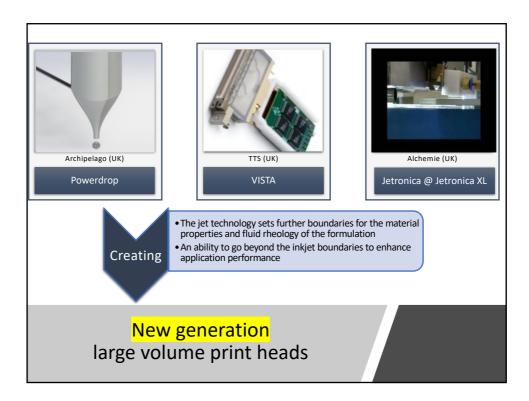


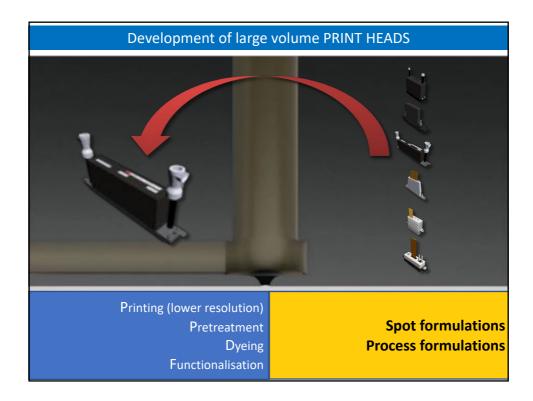


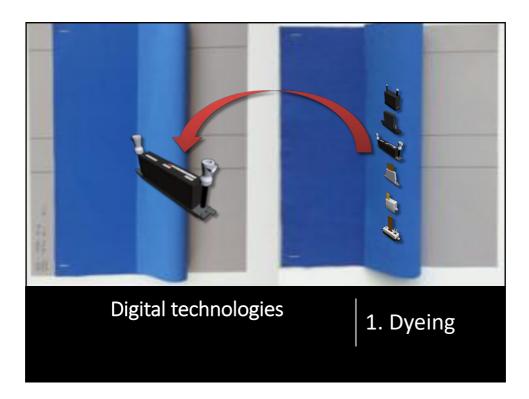
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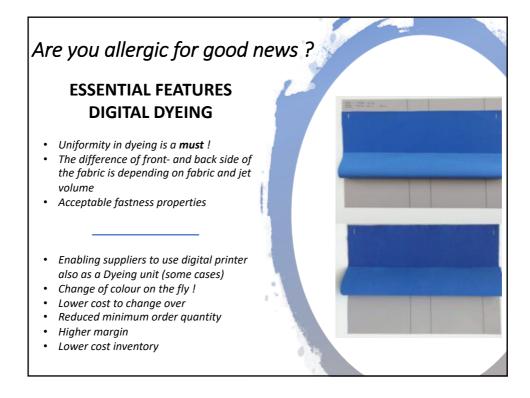


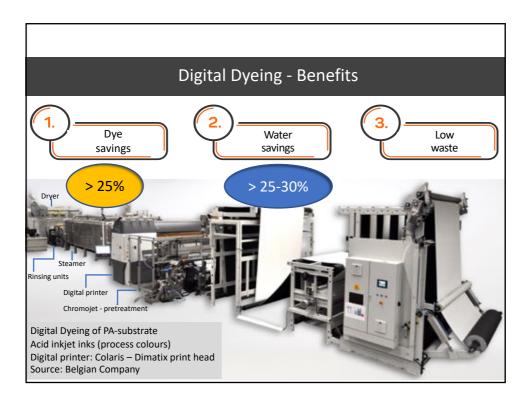








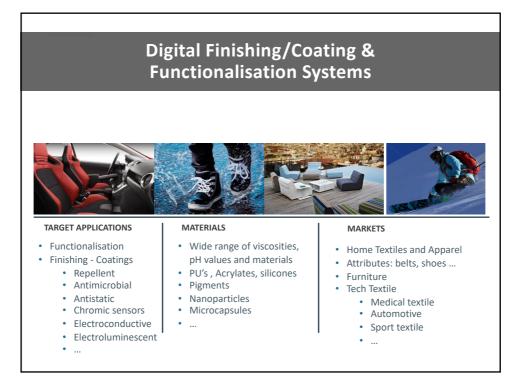


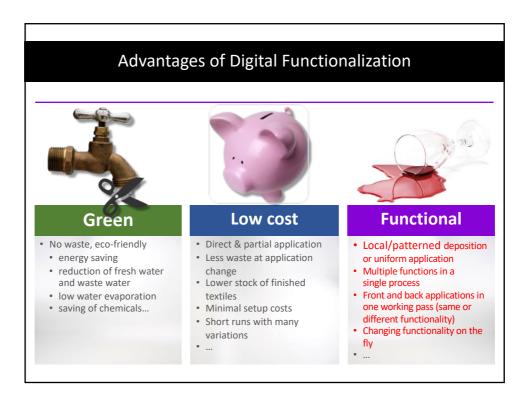


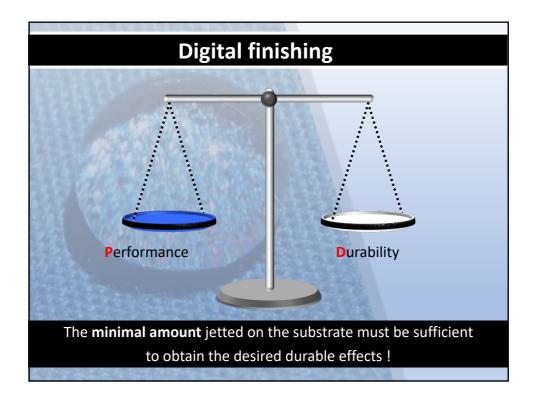


NEW IDEAS never STOP !

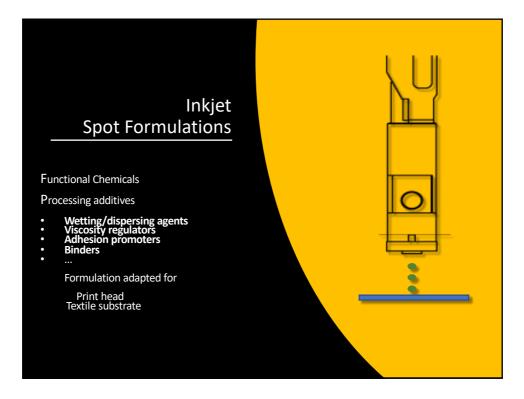


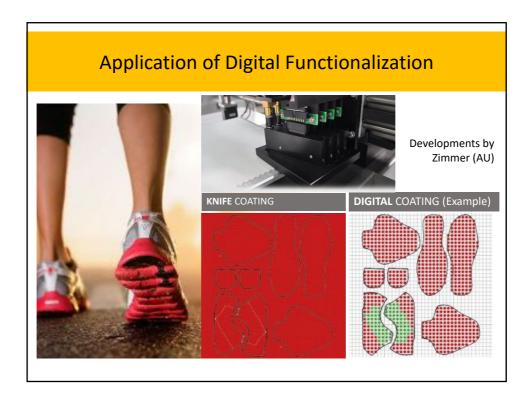






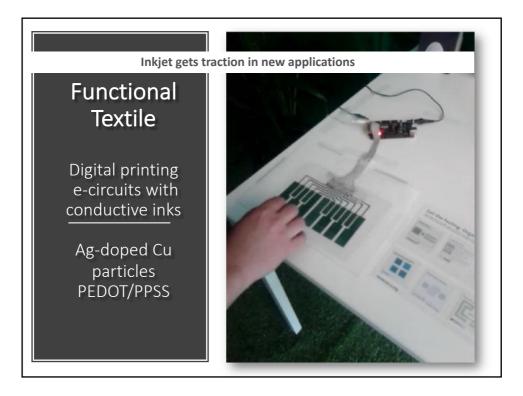




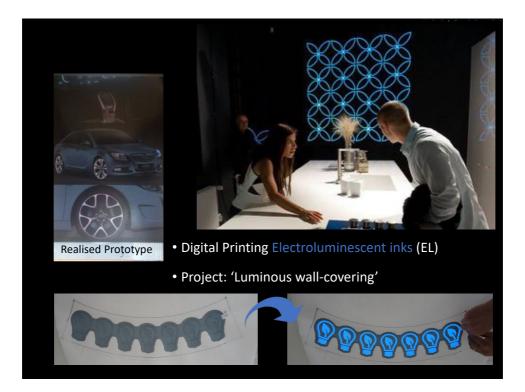


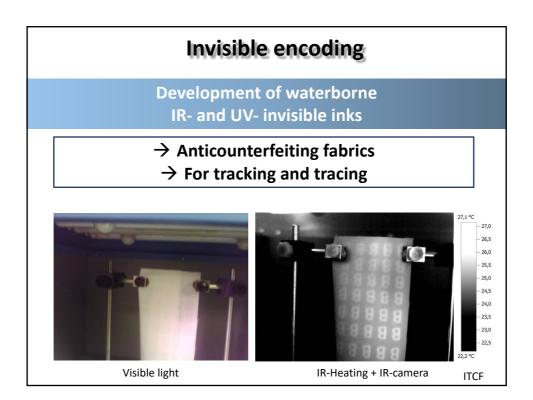




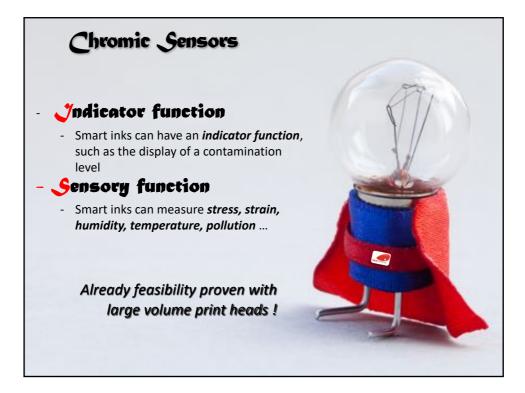


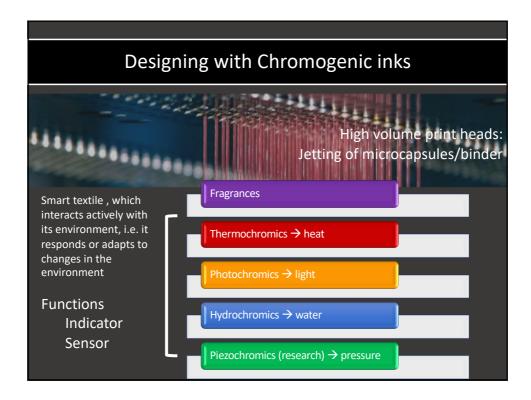


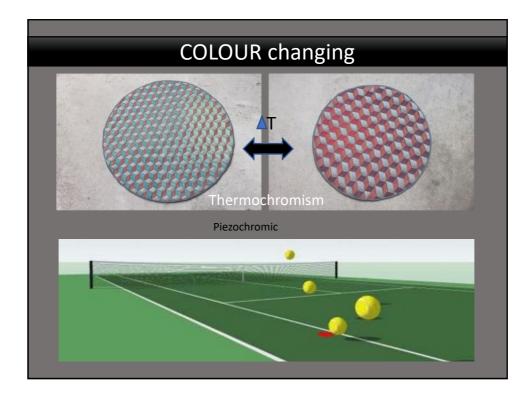


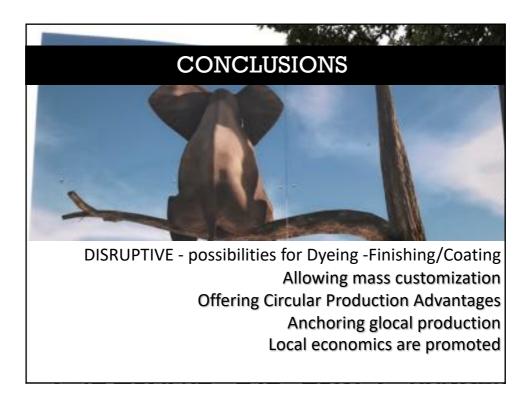


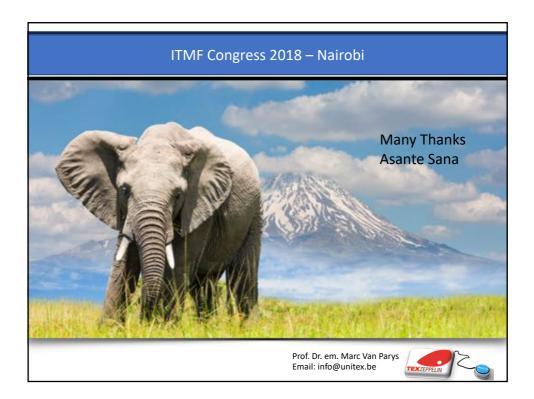












TMF Annual Conference 2018

Nairobi, 9th September 2018

RIEN JANSEN MEMBER OF THE EXECUTIVE BOARD





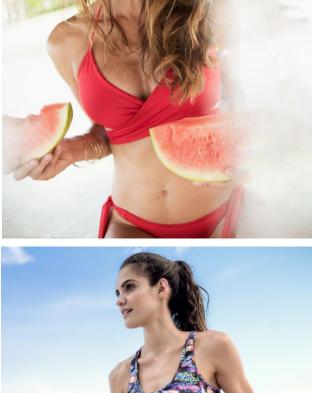












bon Prix

International Concept Multiplication

30 countries across four continents







more than 35 million customers

turnover of 1.72 billion euros



What are the expectations of the customers towards a multichannel brand today?

Customer requirements have been significantly increased in recent years





What impact does this development have on our business?

Customer requirements

Comfortable shopping experience

Permanently fresh trendy styles and fashion inspiration

Affordable fashion for every occasion

Reliable quality standards and sizes

High service level

Sustainability engagement as part of a responsible business activity

Business solutions

Best-in-class Online Shop Mobile First

Focus on trends 12 collections per year

> *Price strategy: Value for money*

Fitting harmonisation Quality standards

48 hours delivery Innovative consulting services (e.g. Fitting)

Risk management, sustainable products Corporate Responsibility as brand value



09/09/2018



How do we transfer these requirements to our sourcing strategy?



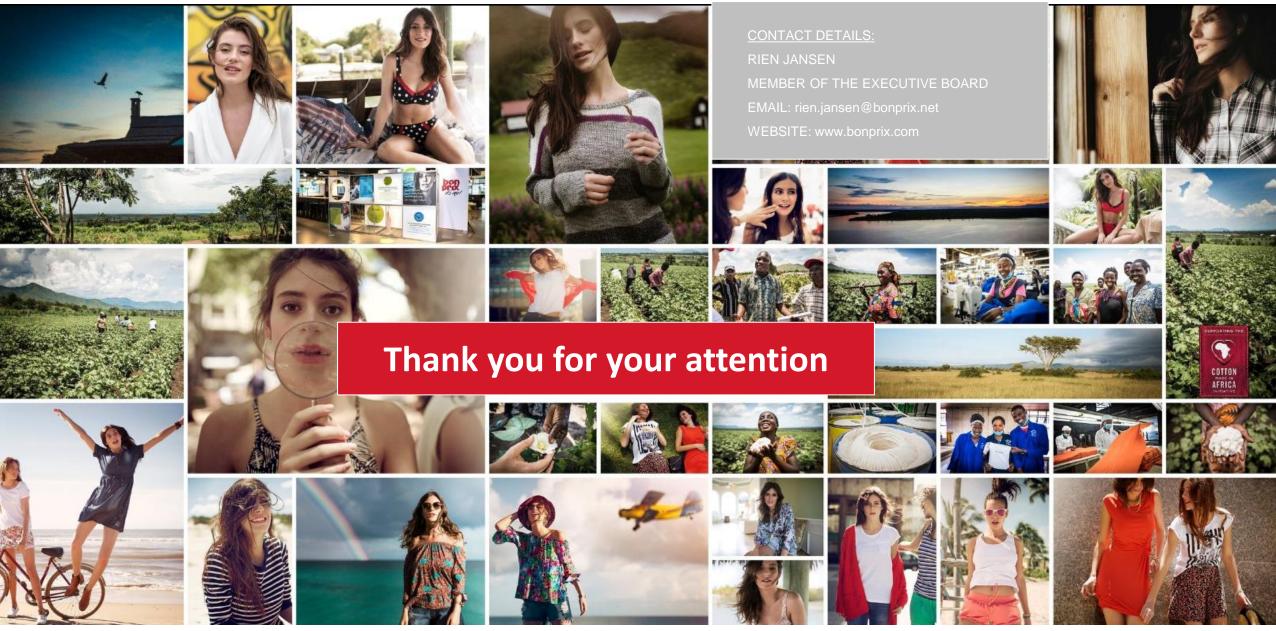


Which potential do we see for the african apparel industry in the future?





How we make ...





Audit Fatigue and Improving Purchasing Practices in the Textiles and Apparel Sectors

by



Nairobi – September 2018



Short term objective (3 years) Reduce number of audits and eliminate redundancy in standards

Longer term objective Become the voice of the industry



Reminder: Objectives



During the Techtextil 2017 and the ITMF meeting in Bali, initial discussions were started with the IAF to join forces to address audit fatigue

NTERNATIONAL FEDERATION

Why the IAF?

- Like minded organization with identical objectives
- Complementary membership base (apparel)
- Strong links within the social compliance sector



Currently social compliance practices in the textiles and garment industries are redundant, confusing and unnecessarily complicated, leading to increased costs

Audit Fatigue

Multiple inspections

When the same supplier is undergoing multiple audits by different retailers, brands, standard holders or other entities, resulting in a multitude of inspections, disruptions and audit costs.

Standard Fatigue

Conflicting requirements

When suppliers have to accommodate differing and often conflicting requirements from their clients resulting in – often unnecessary - high costs of adaptation.



The social compliance sector is very complex and has tens of different players



🎒 GHERZI

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Progress update



We are on the right track!! ITMF and IAF organized joint meetings with key players in social compliance and manufacturing..



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A delegation from ITMF attended the OECD conference: Due Diligence In The Textile Sector. Meetings with additional players have been organized.





Some of the organizations are of particular interest to the ITMF initiative

SOCIAL & LABOR	Name: Social & Labor Convergence Project (SLCP) Type: Social compliance organization Role: Standardize data collection to avoid redundant audits
TRAP RESPONSE	Name: Worldwide Responsible Accredited Production (WRAP) Type: Standard holder Role: Can help standardize social requirements
B etterBuying	Name: Better Buying initiative Type: Other Role: Can put pressure to improve buying practices
BSCI Menter of BSCI	Name: Business Social Compliance Initiative (BSCI) Type: Standard holder / social compliance organization Role: Can help standardize social requirements
E U R A T E X	Name: European Apparel and Textile Confederation Type: Industry Association Role: Can join effort to consolidate industry

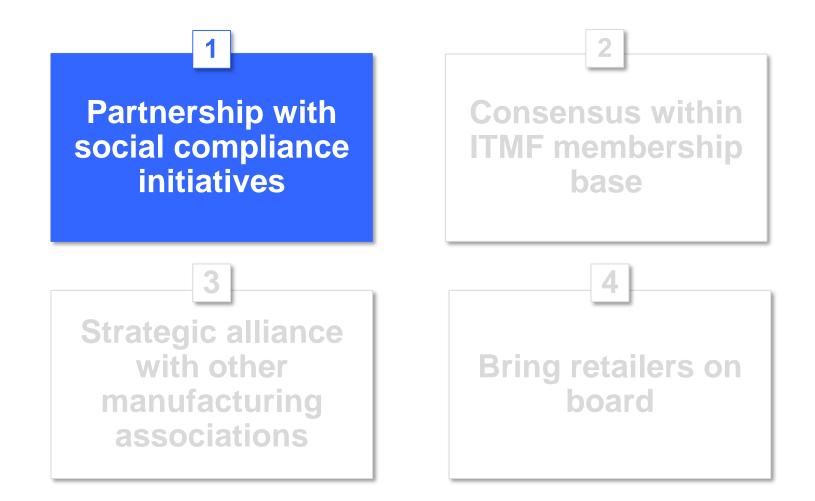


Based on the various meetings, the IAF and ITMF have co-developed a proposal for going forward consistent with the agreement in Bali





Based on the various meetings, the IAF and ITMF have co-developed a proposal for going forward consistent with the agreement in Bali



Proposed process: 1. Partnership with Social Compliance initiatives



SLCP Mission

To create a converged assessment framework that supports stakeholders' efforts to improve working conditions in the global apparel and footwear supply chain.



Deliverables

- 1. Single unified industry wide assessment tool
- 2. A verification methodology
- 3. Clear terms and conditions for using the tool
- 4. Operational plan to facilitate the adoption of the tool (online database)
- 5. A future vision and strategic plan

SLCP constituents

- 1. Brands / retailers
- 2. Manufacturers
- 3. Agents
- 4. National Governments
- 5. Initiatives / standard holders
- 6. Auditing firms / service providers / consultancies
- 7. Industry associations

Proposed process: 1. Partnership with Social Compliance Initiatives



Better Buying is a dialogue and rating platform that is being created to highlight areas for improved purchasing practices.

Examples of purchasing practices

- Failure to pay wages and benefits required by law and buyers' codes of conduct
- Use of excessive overtime, some of which may be forced
- Unauthorized subcontracting to unsafe facilities with poor working conditions
- Increased use of temporary labor making employment more precarious

Suppliers will rate seven areas of their buyers' purchasing practices, including:

- Planning and forecasting
- Design and development
- Cost and cost negotiation
- Sourcing and order placement
- Production management
- Payment and terms
- Management of purchasing practices

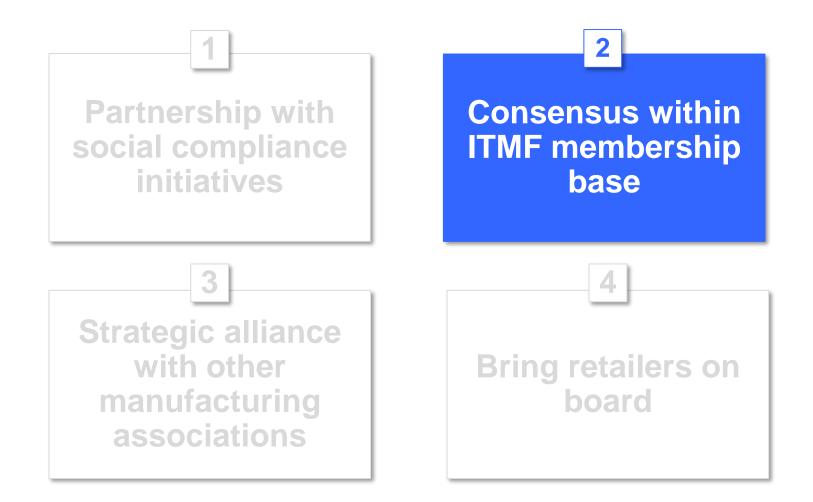


Vision

Through its rating and dialogue platform, Better Buying will support brand and retailer understanding of their impacts, provide them opportunities to explore solutions in collaboration with suppliers, and allow them to report publicly on the efforts they are making toward improved purchasing practices.



Based on the various meetings, the IAF and ITMF have co-developed a proposal for going forward consistent with the agreement in Bali





During the ITMF board meeting in April, the following actions were suggested and approved..

ACTION	STATUS	
Keep members informed	ITMF: Newsletter August 2018 IAF: Newsletter July 2018	
2 Ask member associations to give on ground support (sign up to SLCP – Support BB)	ITMF: Discussions with CNTAC to support SLCP & BB IAF: Discussion with CCCT, call with IHKIB, BGMEA	
3 Promote initiatives to retailers	Planned for 2019	



Based on the various meetings, the IAF and ITMF have co-developed a proposal for going forward consistent with the agreement in Bali



Proposed process: 3. Alliance with other bodies (consolidate industry)

An initial list of industry bodies and standard holders





Proposed process: 3. Alliance with other bodies (consolidate industry)

The initiative will look at identifying standard holders that meet a specific criteria

1. Collaboration with SLCP

Commitment to use the SLCP platform

2. Work with other standard holders

Willingness to work with others to harmonize or mutually recognize audits

3. Compliance with OECD Due Diligence

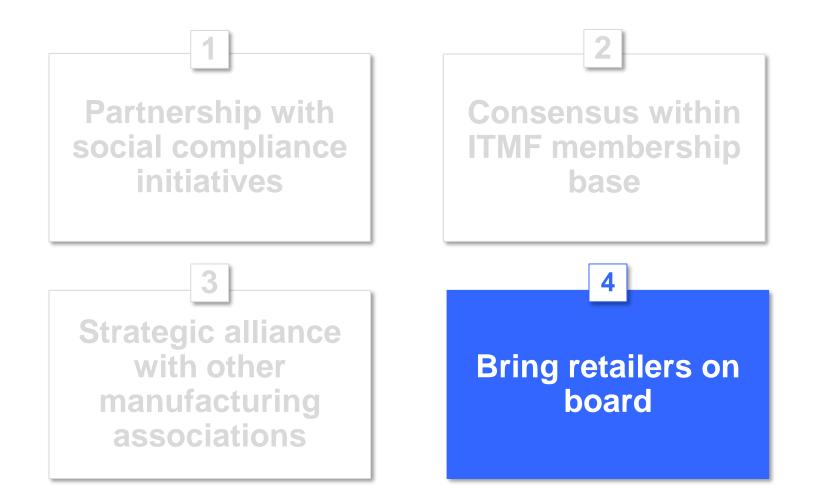
Following the OECD guidelines for due diligence in textiles and footwear

4. Certified bodies for auditors

Use of certified auditors under a recognized certification program



Based on the various meetings, the IAF and ITMF have co-developed a proposal for going forward consistent with the agreement in Bali





Recently Walmart switched to using 3rd party audits and other retailers seem to be following suit..

- Walmart shifted to 3rd party audits for social compliance
- They scrutinized 8 social compliance programs across different industries:
 - Best Aquaculture Practices (BAP)
 - Business Social Compliance Initiative (BSCI)
 - Electronic Industry Citizenship Coalition (EICC)
 - International Labor Organization Better Work
 - International Council of Toy Industry CARE
 - Sedex Members Ethical Trade Audits (SMETA)
 - Social Accountability International (SA 8000)
 - Worldwide Responsible Accredited Production (WRAP)
- Suppliers can select any one of the above 8 programs
- Walmart will continue to carefully review the audits and ensure that companies are compliant through those 3rd party audits



There are multiple reasons why retailers would join the initiative...

1. Increase efficiency

Opportunity to reduce cost, time and effort

2. Consolidate know-how

Make available best practices from several platforms

3. Expand supplier base faster

Easier to bring new manufacturers on board

4. Visibility into the entire value chain

A unified code of conduct will facilitate auditing earlier stages of the process

5. Support a universal industry standard

Opportunity to communicate with consumers



Supporters of the initiative will be the key gateway to retailers



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During the board meeting in April, the following actions were agreed

ACTION	STATUS
1. Become a signatory to SLCP	Completed
2. Participate actively in the governance of SLCP and BBI	August elections for seat in SC, ITMF on ballot, also represents IAF
3. Provide on the ground support through national federations	Discussions with CNTAC, CCCT. To extend to several more associations
4. Ask ITMF and IAF members to communicate about initiatives to their clients	To start in 2019

GHERZI

Audit Fatigue and Improving Purchasing Practices In The Textiles and Apparel Sectors- April 2018



The initiative is expected to take 3 years to reach full maturity..

Year 1

- Identify and select standard holders
- Communicate details to members
- Build consensus in the industry
- Approach select retailers

Year 2

- Expand the initiative to other retailers
- Expand alliance with other organizations
- Begin looking into environmental compliance

Year 3

 Expand initiative to environmental compliance

THANK YOU



Social & Labor Convergence Project

Converged Assessment. Collaborative Action. Improved Working Conditions.

> ITMF Annual Conference 2018 September 7-9, 2018 Nairobi, Kenya



C&A Foundation



NORGES BANK



Social & Labor Convergence Project (SLCP) Why is it needed

25 years of social audits:

'Insanity: Doing the same thing over and over again and expecting different results.' – Albert Einstein





Social & Labor Convergence Project (SLCP) What do we want to achieve?

This project seeks to develop a common, simple, unified and effective industry-wide assessment framework. This will result in a data collection tool and verification methodology, with the intent to replace current proprietary tools.

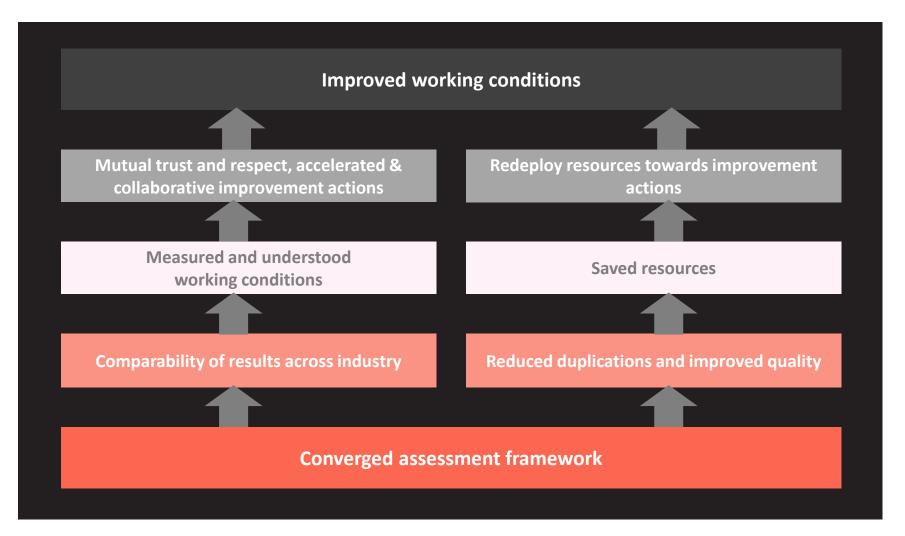
Purpose: end 'audit fatique', save costs, redirect resources to improvement of labor conditions

Website: www.slconvergence.org





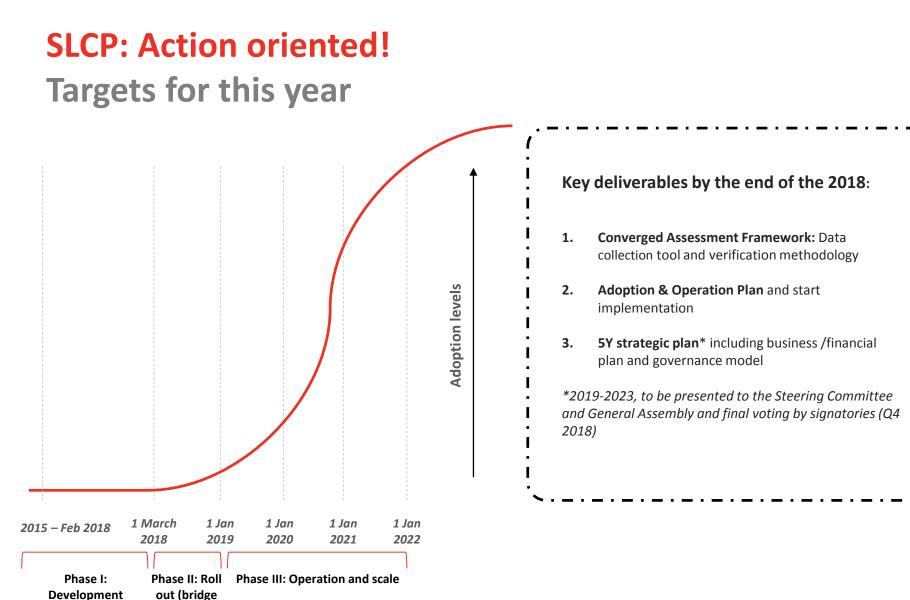
Project Goal and Overall Objective



Contribution to Sustainable Development Goals:







SOCIAL & LABOR

of Assessment

Framework

year)

SLCP: Assessment Process

Good to know:

 ✓ Facility initiates the process with Self/Joint Assessment

STEP 1: DATA COLLECTION

Collection can be done by either self-assessment 'SA' (facility only) or a joint assessment 'JA' (facility + external assistance)

STEP 2: VERIFICATION

The Verifier will check the correctness and completeness of the data gathered through the assessment tool. They will confirm or amend the *original* assessment report data.

A Verifier Oversight Organization (VOO) will be in place to select verifiers and perform quality checks.

STEP 3: DATA HOSTING&SHARING

The Verified assessments will be shared through a semidecentralized model with a Distribution Gateway and Accredited Hosts

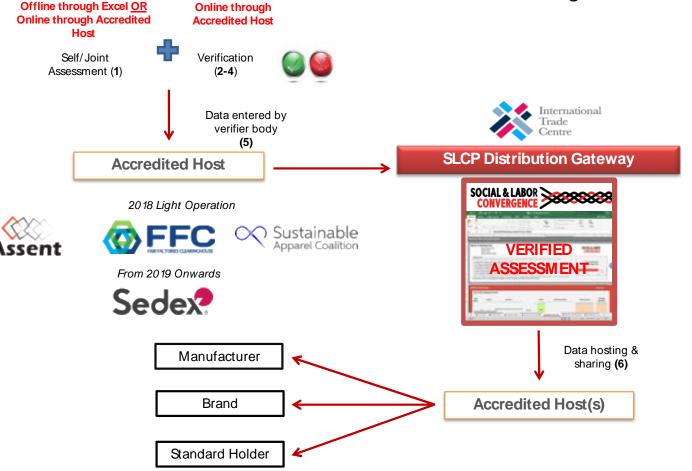




SLCP: Data Hosting & Sharing

Good to know:

- ✓ Facility ownership data
- ✓ Facility permissioning sharing
- ✓ High standards on data security





SLCP: Converged Assessment Framework How the SLCP data could be used

In-Scope of SLCP

Verified data on Worker Life Cycle:

- ✓ Child labor
- ✓ Working hours
- ✓ Wages
- ✓ Forced labor
- ✓ Collective bargaining
- ✓ Etc

Out-of-Scope of SLCP

Additional layer of value judgements and follow-up actions

- → Scoring/ranking
- → Benchmarking
- → Industry standard
- \rightarrow Compliance w/ company Code of Conduct
- \rightarrow Certification scheme
- \rightarrow Collaboration
- \rightarrow Remediation efforts



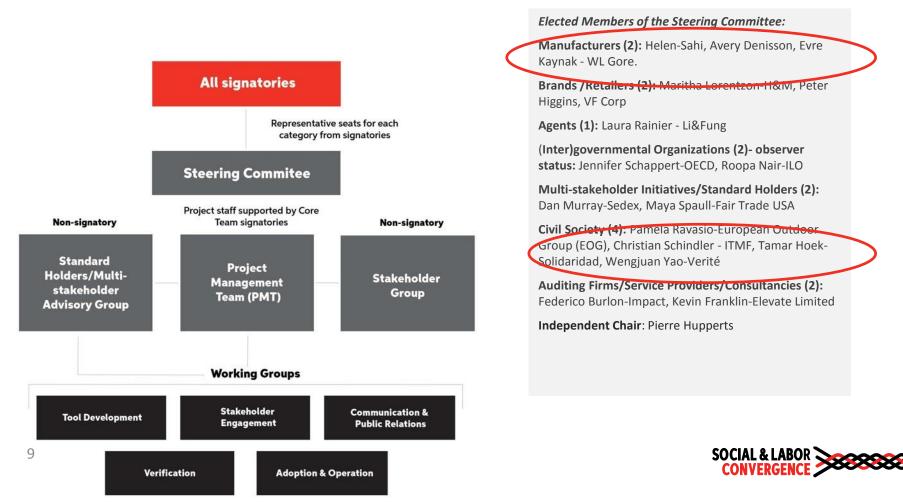
SLCP: How we take decisions

Several bodies have been established in order to:

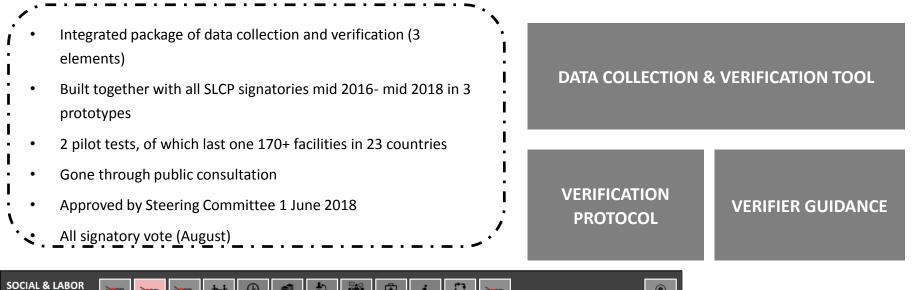
- 1. Create checks and balances
- 2. Make a clear division between strategy and operations
- 3. Recognize different involvement levels of stakeholders and parties

Good to know:

 Manufacturers equal participation and say



Converged Assessment Framework Accomplished



SOCIAL & LAB	2000 C	Instructions	Facility Profile	Recruitment & Hiring	Working Hours	Wages & Benefits	Employee Treatment	Employee	Health & Safety	K Termination	Mgmt. Systems	Above and Beyond				Developer Mode
Sections and Sub-Sections													-			
Within each section, question: For the first 7 sections, these o				of Conduct elen	nents:											
Section	Sub-Section															
Recruitment and Hiring	Child Labor, Forced Labor, Discrimination, Employment Practices, Suppliers / Subcontractors															
Working Hours	Working Hours															
Wages and Benefits	Wages and Benefits, Other and Best Procises															
Employee Treatment	Forced Labor, Harassment and Abuse, Discrimination, Discipline															
Employee Involvement	Freedom of Association and Collective Bargaining (Unions and/or Employee Representative Groups and Industrial Action / Strikes), Discrimination, Grievance System, Employee Feedback															
Health and Safety	General Work Environment, Building Safety, Emergency Preparedness, Chemicaly/Nasardous Substances, Employee Protection , Materials Handling and Storage, Electrical Safety, First Aid/Medical, Contractor Safety, Darmitories, Canteens, Childcare															
Termination	Forced Labor, Discrimination, Employment Practices															
Management Systems	Palices and Procedures / Goals and Strategy, Roles and Responsibility / Communication and Training. Self Assessment, Continuous Improvement															
Above and Beyond	Workplace Well-Being, Community															
The Concept of Steps																
Global apparel and footwear r With this in mind, the Social ar Step 1 - Practices representing Step 2 - Practices representin Step 3 - Practices that go "abc	nd Labor Convergence P t basic "compliance" top g "management system	roject (SLCP) seel ics that can be fo is" topics found w	ks to breakdowr ound within most vithin most socia	the informatic social assessm l assessment t	on requested winent tools.	thin the tool in			lace well-being	and communit	impact.					
How do I know which question Step 1 questions cover key st Step 2 questions cover manag Step 3 questions cover above	ns are in which step? ages or aspects of the er tement systems can be	nployment lifecy found in the 8th s	cle can be found	within the first												

Employee Involvement

Employee Treatment

H&S

Termination



Converged Assessment Framework Next steps

• Translation into Mandarin (2018 Light Operation)

- Publication on SLCP website
- Implementation 2018 Light Operation
- Evaluation Q1 2019 and update

DATA COLLECTION & VERIFICATION TOOL

VERIFICATION PROTOCOL

VERIFIER GUIDANCE

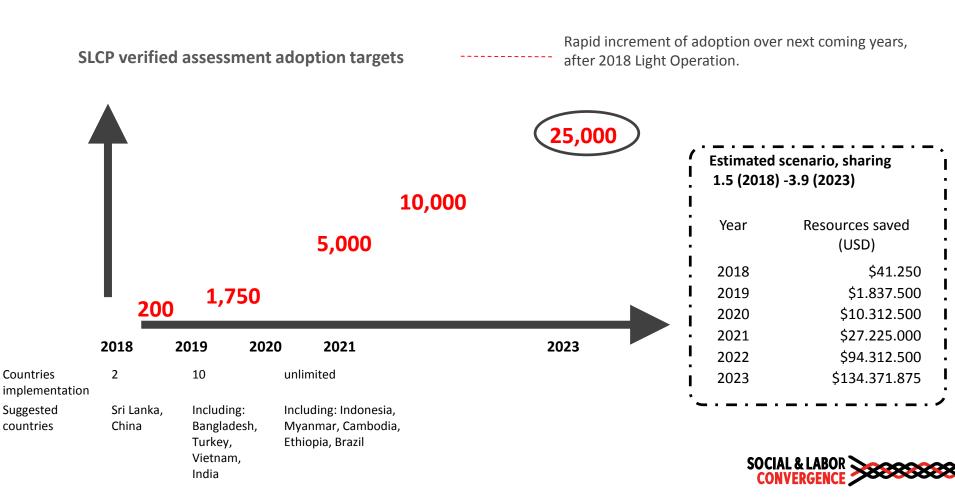




5-year strategy targets Costs&benefits

Good to know:

- ✓ Facility negotiates price for verification
- ✓ Small SLCP upcharge '200-300 USD'
- Estimated break-even point 1.5 'shares'



SLCP Signatories – 181

August 2018

Manufacturers (38): Artistic Milliners, Arvind Mills, Avery Dennison Corp, Ciel Textile, Chenfeng Group Co., Classic Fashion, Comfit Composite Limited, Crystal Group, DBL Group, Delta Galil, Esquel Group, Flextronics, Hanbo Enterprises Holdings Limited, Hansae, Co. Ltd. Hirdaramani Ent., ISKO, L&E Int. Ltd., MAS Holdings, Milteks Group, Nester Hosiery, Nien Tsing Textiles, Pratibha Syntex Limited, Ramatex Group, SaiTex, Sing Lun Global, SixSigma Apparel Network, SLN Tekstil, Soorty Enterprises, Sun Queen Garments, TAL Apparel Group, Thread International, W. L. Gore & Associates, VogueTex, World Knits Limited, Yesim, Yousstex, Youngone, Yunus Textile Mills

Brands /Retailers (63): adidas Group, Aldo, Amer Sports, American Eagle Outfitters, Ann Inc, Arc'teryx, Arena, Asics Corporation, Bestseller A/S, Brooks Sports, Burton Snowboards, C&A, C & J Clark International Ltd, Camelbak, Columbia Sportswear Co., De Bijenkorf, Ecco Holding A/S, Eileen Fisher, Esprit, Fanatics, Fast Retailing/Uniqlo, Gap Inc., G-Star, H&M, HEMA, Hudson's Bay Company, IC Group, INDIGENOUS, Inditex, KappAhl, Kathmandu, Kering, L Brands, Levi Strauss & Co., Lojas Renner, LL Bean Inc., Loomstate, Iululemon, Macy's, Mountain Equipment Co-op (MEC), Miss Green, Mud Jeans, M&S, Nike Inc., Outerknown, Patagonia Inc., PrAna Living LLC, Puma, PVH Corp., REI, SanMar Corp, Stella McCartney, Schutt Sports, Talbots, Target Corporation, The Children's Place, Tory Burch, Uniform Project, VF Corporation, Vetta Brands, Williams Sonoma, Inc., zLabels, Zephyr Graf-X

Agents (6) Ethical Apparel Africa, Haddad Group, Li&Fung (Trading) Ltd., MGF Sourcing, Piece&Co, Randa Accessories

National Governments (2): Denmark - Ministry of Foreign Affairs, Netherlands Government

Multi-stakeholder Initiatives/Standard Holders/Civil society (22): Abvtex, Cradle to Cradle Products Innovation Institute, Danish Fashion Institute, Ethical Trading Initiative Norway (IEH), Good World Solutions, Fair Factories Clearinghouse, Fair Trade USA, Fair Working Conditions, Freedom Fund, IDH, Leather Working Group, MVO Nederlands, New Earth, NBIM, Proudly Made In Africa, Responsible Sourcing Network, Sedex, Sustainable Apparel Coalition (SAC), Solidaridad, The Mekong Club, Verité, Worldwide Responsible Accredited Production (WRAP), Textile Exchange

Industry Association (8) AAFA, EURATEX, European Outdoor Group (EOG), Istanbul Apparel Exporters' Association (İHKİB), International Apparel Federation (IAF), ITMF, JAAF, Outdoor Industry Association (OIA)

Auditing Firms/Service providers/Consultancies (40): ALGI, AndWider, ANM Transformational Solutions, Asia Inspection, Asya CC&C, Assent Compliance, Bureau Veritas, BSI group, Control Union Certifications, CTC Groups, DNVGL, EcoVadis, Elevate, FutureMade, iMentor, Impactt Limited, Intertek KSA Leverage Limited, Koopman Works, MicroBenefits, NEWAsia Solutions Limited, Omega Compliance, Openview Services Lmtd., Partner Africa, Quizrr, SCS Global Services, SCSA, SewEasy, SMT Global, SGS, SIM Supply Chain Information Management, The Sentio Advisory Group, Taos Network, TÜV Rheinland, TÜV SÜD, Stantec, Sumerra, Sundar, UL Responsible Sourcing, Ulula, Workplace Options

Intergovernmental organizations – observer status (2): ILO, OECD Non-signatory Advisory Group of Standard Holders/Multi Stakeholder Initiatives (3): FWF, GSCP-CGF, SAI



Please join us!

Become a signatory and confirm your (public) support to SLCP by sending an email to <u>christian@apparelcoalition.org</u>

"I believe we are on the right track to achieve the objective of converging and eliminating the current practice of replication of efforts." Abhishek Bansal, Head of Sustainability at Arvind Limited

"We believe the SLCP is an example of industry convergence to accelerate change and drive impact for workers." - Noel Kinder, VP Sustainable Manufacturing at Nike

"Intertek actively supports the effort of the SLCP to promote convergence of the industry, reduce audit fatigue and help organizations focus their resources on continuous improvement." - Christophe Liebon, VP Supplier Management-Business Assurance at Intertek



Thank you!



C&A Foundation



NORGES BANK



BRING INSPIRATION AND INNOVATION TO EVERY ATHLETE* IN THE WORLD HAVE A BODY YOU ARE AN ATHLETE



OUR SUPPLY CHAIN REMAINS COMPLEX





FLUCTUATING MATERIALS PRICES



INCREASINGLABOR COSTS





INCREASING TARIFFS





MARKET





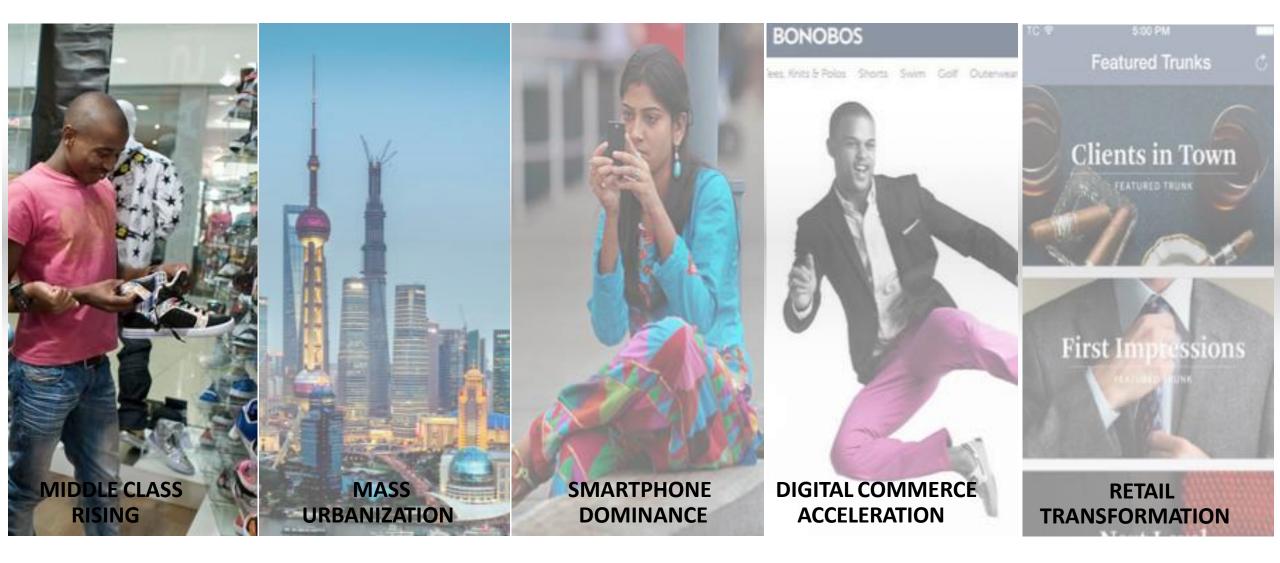
CHANGING CONSUMER





LACK OF SYSTEMS INNOVATION

POWERFUL TRENDS ARE SHAPING THE MARKETPLACE



OUR MOONSHOT

DOUBLE THE BUSINES HALFTHE INPACT

LEADING PCHANGE

Constant of the Party of the



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ACCOUNTABLE

01012-70

FUNCTIONING COMPLIANCE

TRANSPARENT



REDUCE AUDIT FATIGUE

FACILITATE BRAND ENGAGEMENT ON SUPPORT OF SUPPLIER COMPLIANCE REMEDIATION

INCREASE THE CREDIBILITY OF DATA AND ACCOUNTABILITY OF SUPPLIERS

ENABLE REINVESTMENT OF SAVINGS INTO SUPPLIER CAPABILITY BUILDING

COLLABORATION

INVOLVEMENT & FUTURE COMMITMENT

TIMELINE TO 2020

End of Q4 FY20: Full adoption of SLCP by Nike T1



IT IS NOT ENOUGH TO ADAPT TO WHAT THE FUTURE MAY BRING...

...WE'RE CREATING THE FUTURE WE WANT TO SEE THROUGH SUSTAINABLE INNOVATION

MARK PARKER CHAIRMAN, PRESIDENT AND CEO, NIKE INC.







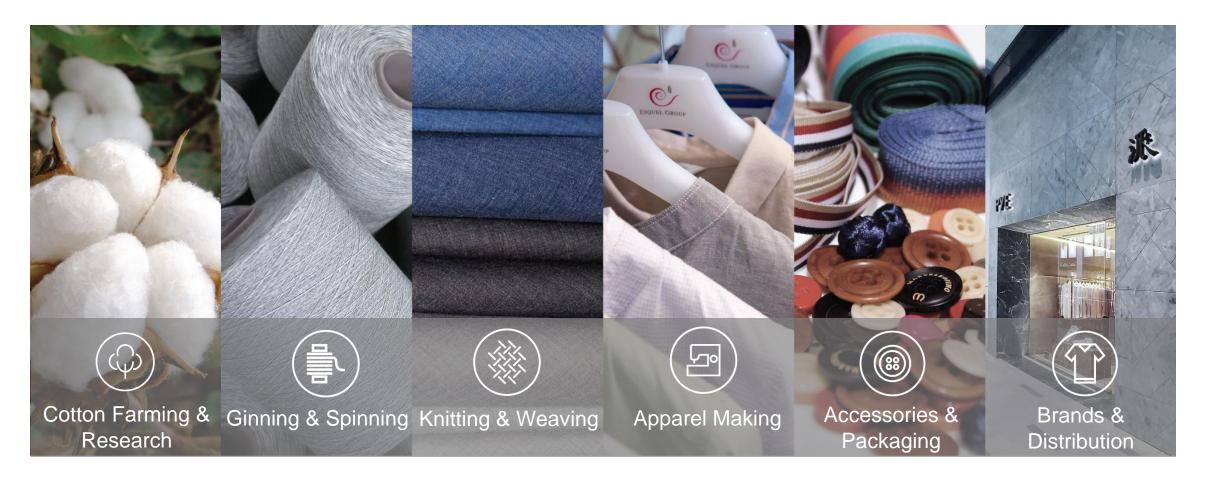
Esquel and Social & Labor Convergence Project

Helen Chen, Director, External Relations and Chief Representative

About Esquel

A Vertically Integrated Textile and Apparel Company

Founded in 1978, Esquel supplied over 110 million shirts to leading brands around the world in 2017





Our Mantra and Guiding Principles

Vision: Making a Difference

Tackle climate change through Protecting the Environment.

Close Wealth Gap by Raising the Income of the Poor through Manage Better and Raising the Ability of the workers.



Our Mantra and Guiding Principles

Mission: Fun People Serving Happy Customers

5E Culture: Ethics, Environment, Exploration, Excellence, Education



Corporate PowerPoint 2018

Sustainability - People

Regarding Employees as Our Biggest Asset

Perceiving Employees' Health, Safety, and Quality of Life as Our Priority



Esquel Vision - SLCP

- Develop single, industrywide assessment tool and reduce nonvalue-added audits.
- Participate in the development of the SLCP tool to ensure the supplier voice is heard and that the tool is practical for suppliers.
- Aspire that SLCP will be incorporated in existing standards/indexes and be widely accepted by the industry.



Esquel as SLCP signatory

Rationale

- Reduce audit fatigue
- Seek better auditing efficiencies to build consensus on a common industry standard for auditing
- Reallocate resources from excessive customer audits to focus on internal improvements including training, development and improving employee welfare



Esquel as SLCP signatory

Involvement

- Participate in working group to build the tool
- Participate in pilots and light operations to improve the tool

Esquel facilities participated the pilot phase 1 and 2 in 2017 and 2018 respectively .



Commitment

- Continue to provide support on the development of the program as well as the tool.
- Promote the SLCP tool and its benefits to our customers. (both SLCP members and non-members)
 - The forecast is by April 2019, 10 countries will be covered for the verification (for Esquel Vietnam, China, Sri Lanka)





DRIVING SUSTAINABILITY

A Value Chain Responsibility





James Carnahan, Global Sustainability Manager ITMF Conference, Nairobi, September 2018



A trusted heritage











A global leader in specialty chemicals across the textile, paper and emulsions sectors

/ Brand & Performance Textile Specialties (BPT)

Global leader in textile chemicals and dyes

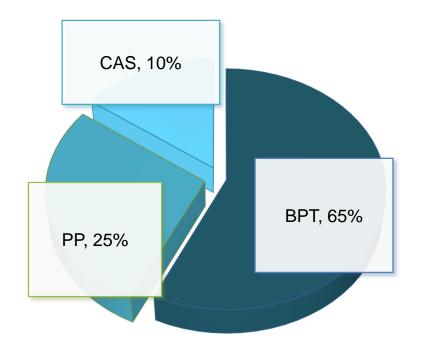
/ Packaging & Paper Specialties (PP)

Leading provider of colorants, optical brightening agents, process and surface chemicals

/ Coatings, Adhesives & Sealants (CAS)

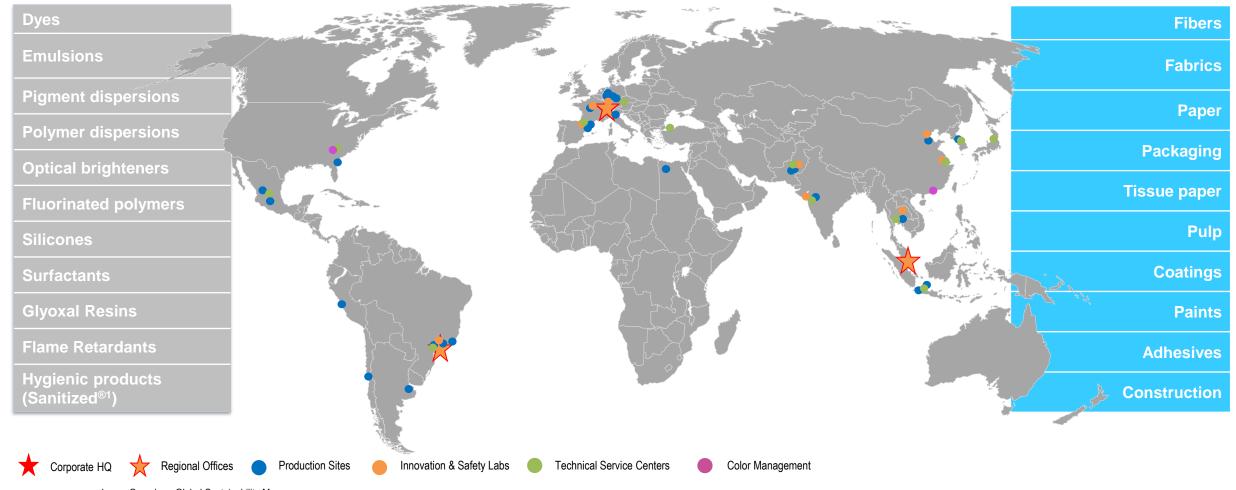
Leading provider of specialty emulsions to paints, adhesives, construction and the textile, leather and paper sectors

Sales FY 2017: \$1.27Bn





Global presence /

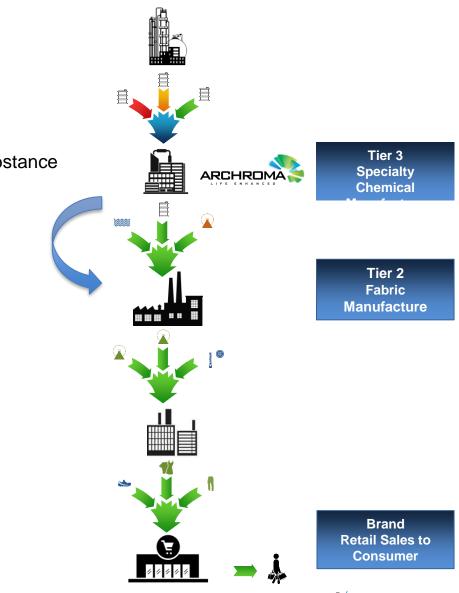




Textile Value Chain Technology Transition Sustainability Related Initiatives

Textile Mills (Push)

• Technical grade chemicals, conforming to chemical Manufacturing Restricted Substance Lists (MRSL's) – Industry Standard?





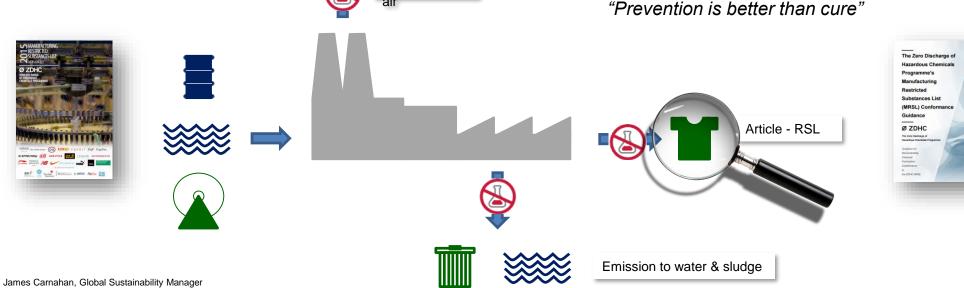
Toxicological control for Consumer

- Started in the late 1980's
- The FOCUS is on the final fabric/article after the value has been added
- Sustainability is a part of **Quality Control**; *"Fix the problem afterwards and claim compensation"*

MRSL for

SUBSTANCE

- Concerned with what is discharged from a textile mill, as well as in the finished goods
- The prime source of risk comes from the dyes and chemicals
- The FOCUS has moved to the dyes and chemicals before the value has been added
- Sustainability becomes a part of **Quality Assurance**; "Prevention is better than cure"



Emission to



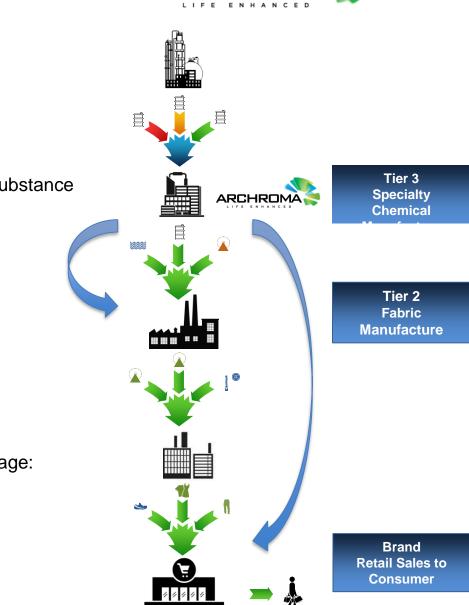
Textile Value Chain Technology Transition Sustainability Related Initiatives

Textile Mills (Push)

- Technical grade chemicals, conforming to chemical Manufacturing Restricted Substance Lists (MRSL's) – Industry Standard?
- Technologies designed to reduce resource requirements:
 - Water (high water stress areas)
 - Energy (CO₂ footprint)
- Technologies based upon renewable feed stocks
- Technologies for fabric longevity

Brands (Pull)

- Compliance to "brand specific" article Restricted Substance Lists (RSL's)
- Technologies reducing environmental footprint supporting sustainability message:
 - Water reduction
 - Renewable raw materials
- Recycling Circular economy





Brands & Sustainability A Prioritised Approach

- 1. Mitigating Risk
- Legal risk
- Consumer risk
- Corporate Social Responsibility risk (garmenting)
- Environmental risk

2. Adding Value

- Support Specific Brand reputation
- Recycling to support consumerism
- Finite resources reduction
- Pollution mitigation/reversal

The hidden cost of fast fashion 2,700 litres of water to produce a T-shirt Second most polluting industry after oil 11.1M tons of textiles in US landfills annually \$46.7B of unworn clothes in UK closets

Source: WWF; USA Today; Treehugger. Image: REUTERS/Alessandro Garofalo



Brands & Sustainability



An increasing degree of Influence

Trends

- Sustainability Awareness
- Fast fashion / Hub logistics
- Online markets
- Diversification into article segments/product offers
- Multi-functionality
- Recycling / Circular economies
- Testing the market (tentatively)
- Transparency in supply chain
- End of life design
- Recognition of social awareness
- Social media presence on issues/specifics
- Collaboration horizontal and vertical



A Brand's Perspective: The Future of Denim



Increased levels of functionality – more ecologically informed design

Increased use of recycled fibres or low impact fibres (BCI, E3, Tencel)

Less reliance on pure indigo

More functionality – anti-odour, moisture management, stay cool – athleisure tendency

Durable effects – stay dark, stay soft

End of life consideration (recycle, upcycle, de-brand)



A more efficient (logistic & ecological) manufacturing supply chain

Cotton sourced from countries with sufficient water resources and efficient use thereof

Use of low/zero water coloration technologies

Highly efficient spinning/weaving

"Dry" wash-down processes, techniques and equipment specified as standard

Ethical rights for Workers

Increased focus on impurities throughout the supply chain



Clear commitment for real change

Commitment to educate and provide customers with a choice

Sustainability metrics specified on the garment PO

Balance the price willing to pay for the garments with the cost to the environment – alignment of merchandising with sustainability

G-star/Patagonia/Levi's & other brands leading the way





Availability of data/options for consumers to make an informed purchasing decision

Clear defined advantages for the environment with the purchasing of rational denim

 Implications of continuing to buy denim as today

patagonia

 Understanding what is really behind "cheap" denim



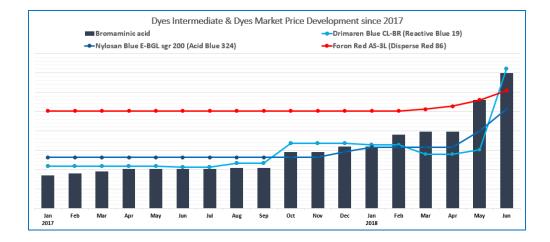
James Carnahan, Global Sustainability Manager ITMF Conference, Nairobi, September 2018

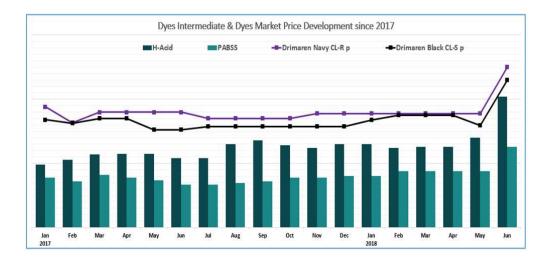


Raw material prices

- Chemical intermediates:
 - Availability
 - closures from industrial accidents
 - closures from legislative enforcement









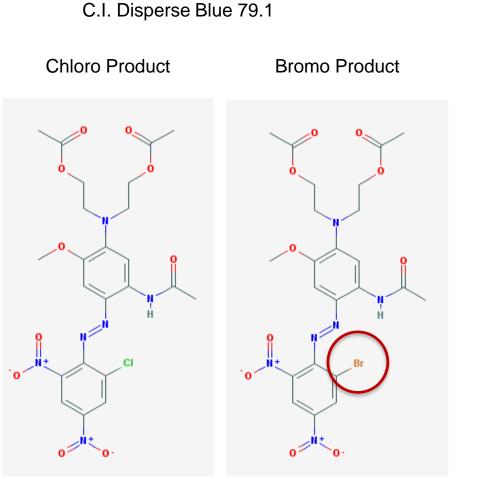
Raw material prices

٠

- Chemical intermediates:
 - Availability
 - closures from industrial accidents
 - closures from legislative enforcement
 - Hazardous chemical contaminates Example C.I. Disperse Blue 79.1 Impurity: Halogenated phenols Chlorine based intermediates lower price: 6-CI-2-4-dinitro aniline \$ 25/kg 8-Br-2,4-dinitro aniline \$ 38/kg



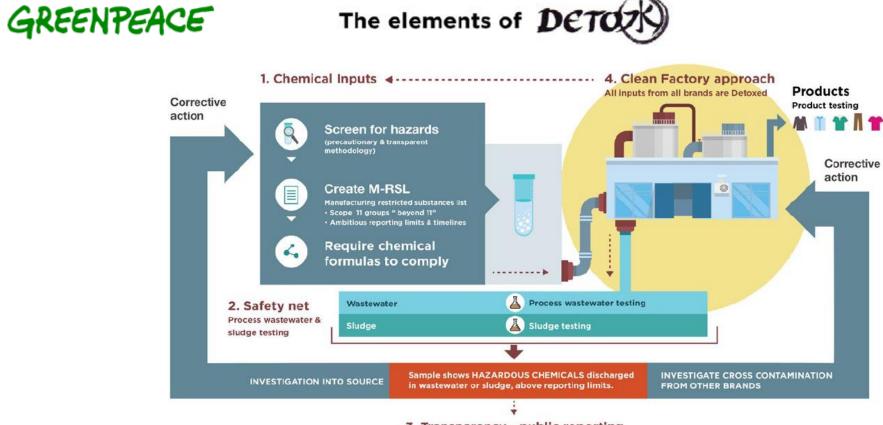
BUT.... Chlorinated phenols are carcinogenic



James Carnahan, Global Sustainability Manager ITMF Conference, Nairobi, September 2018



Remember Brand Supply Chain Transparency?



3. Transparency - public reporting



Raw material prices

- Chemical intermediates:
 - Availability
 - closures from industrial accidents
 - closures from legislative enforcement
 - Hazardous chemical contaminates
- Alternative chemistries biomass based









Raw material prices

- Chemical intermediates:
 - Availability
 - closures from industrial accidents
 - closures from legislative enforcement
 - Hazardous chemical contaminates
- Alternative chemistries biomass based

Ancillary costs

- Additional registration
- Compliance testing

New technology risks

- Supply
- Performance

Process Change

Textile Manufacturing – Change management

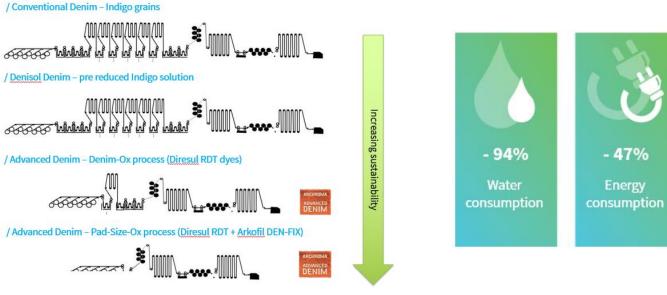




Cost mitigation (where possible)

- Variable costs:
 - Water and effluent charges
 - Energy reduction
- Fixed cost dilution
 - Higher productivity levels





Requires Value Chain Collaboration

- 72%





Cost mitigation (where possible)

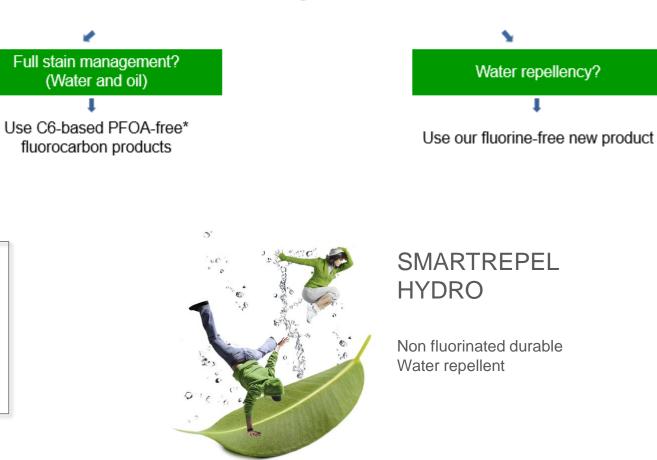
- Variable costs:
 - Water and effluent charges
 - Energy reduction
- Fixed cost dilution
 - Higher productivity levels
- Reduce performance to be "Fit for Purpose"
 - For example: Repellancy



Greenpeace Detox Report: Destination Zero

"all brands have made significant progress in eliminating PFCs and substituting where necessary

- 72% reported complete elimination
- Remaining 28% are making good progress towards elimination"



What do you need...



Cost mitigation (where possible)

- Variable costs:
 - Water and effluent charges
 - Energy reduction
- Fixed cost dilution
 - Higher productivity levels
- Reduce performance to be "Fit for Purpose"

Challenges

- Passing through discrete sustainability cost impacts
- Business as usual approach
- Incremental changes having minimal sustainability impacts Resilience



Yes

Management Strategies – Manage Expectations

- Conscious organization commitment
- Stakeholder communication:
 - Internal KPI Alignment to Strategy
 - Value Chain
 - Upstream vendors/services (cost)
 - Downstream customers/specifiers (value)
- Departure from traditional "Cost Plus" pricing models
- Financing Sustainability Green Bonds













Do we need to "Business Case" our Moral Obligation?

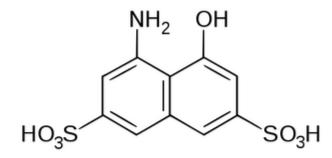
James Carnahan, Global Sustainability Manager ITMF Conference, Nairobi, September 2018





The H-acid Effluent Problem

H-acid is one of the leading dye intermediates in the world, used in manufacture of black dyes. India is the second largest manufacturer of H-Acid in the world after China. However, H-acid is responsible for the most polluting industrial effluent in the dye and dye intermediate sector.

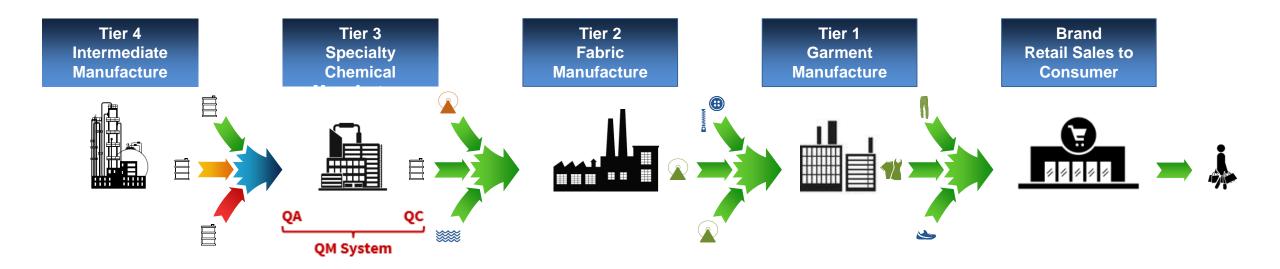


Did you know that manufacturing 1 kg of H-acid, results in the generation of 50 kg waste?

In other words, it has an E-Factor of 50. In fact, the final isolation step is responsible for 50% of the overall waste generated. The waste is of dark color, strong acidity and contains substituted derivatives of naphthalene compounds. These organic substances are toxic, non-biodegradable, difficult to decolorize and resistant to conventional treatment. It has a very high COD of 1,50,000.



Textile value chain / Importance of Tier 3 to screen out bad chemistry



ANNUAL CONFERENCE OCTOBER 20-22 PORTUGAL





ATP would like to invite you for the ITMF Annual Conference 2019

This would be the 3rd ITMF Conference organised in Portugal – Porto (1993, 1969)



"Create and Share Value in the Textile Industry on Digital Economy Paradigm"



ATP – Textile and Clothing Association of Portugal is an employer association, with national scope, and represents around 500 companies from all sub-sectors of textile and apparel sector. These companies provide more than 35.000 jobs and a turnover of 3.000 million Euros, of which two third parts are destined to exportation.

ONE OF THE MOST IMPORTANT SECTORS IN PORTUGAL The textile and clothing industry in Portugal represents 11% of the added value, 9% of the turnover and production and 20% of the employment in the manufacturing industry, and more than 10% of total exports.



Portugal is the new world's case study in the Textile Industry.

Creativity, innovation and high performant service are the drivers that make the difference.

Textile in Portugal is Resilience, Tradition, Art and Passion. Heart and soul transferred to objects of desire on material that dresses our lives wherever you turn.



Conference Venue: Sheraton Porto Hotel & Spa







Other venues: **Palácio da Bolsa** (Stock Exchange)







Other venues: **Caves Ferreira** (Ferreira Cellars)







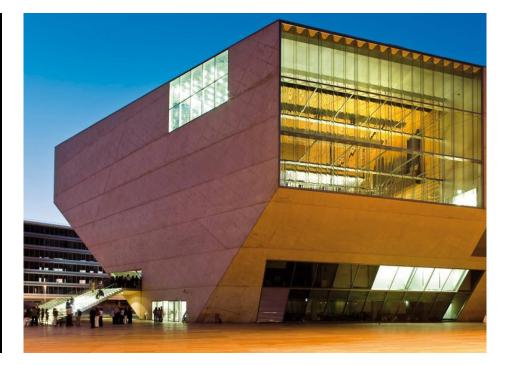
Porto.

EUROPEAN BEST DESTINATION 2017 * PORTO *

THANK YOU!



Visit: Casa da Música (House of Music) São Bento railway Station











Visit: Serralves Foundation & Museum of Contemporary Art





Places to visit: Porto Cruise Terminal & Beaches







Places to visit: Cathedral, Lello Bookshop & Clérigos



The region: Guimarães Braga









The region: Douro Valley



ANNUAL CONFERENCE OCTOBER 20-22 PORTUGAL We hope to see you in Porto for the ITMF Conference 2019!



SAVE THE

DATE