Stakeholder workshop on strengthening governance for the sound management of chemicals and waste beyond 2020

Session 4

Strengthening private sector governance and engagement

*What can we learn from the textiles sector?*

- Standards in the textile sector

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$32.23\text{ Bil. in 2025}$

$23.62\text{ Bil. in 2018}$

$\approx 20\%$ of global wastewater pollution

$\approx 10\%$ of total Greenhouse Gas Emissions

Over 25 Mio worker in over 100 countries are employed in this industry
Where are the Chemicals used in Textile Manufacturing?

Textile process from fiber to finished Garment and chemical use

<table>
<thead>
<tr>
<th>Production/Manufacturing step</th>
<th>Processes</th>
<th>Chemicals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber production</td>
<td>Plant harvesting</td>
<td>Pesticides, Insecticides, Fertilizers</td>
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<tr>
<td>Yarn production</td>
<td>Spinning</td>
<td>Spinning oils</td>
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<tr>
<td>Fabric production</td>
<td>Weaving, Knitting, Non-woven</td>
<td>Sizing chemicals, lubricants, solvents, adhesives, binder</td>
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<tr>
<td>Pre-treatment</td>
<td>Washing, cleaning of the fabric, De-sizing, Scouring, Bleaching, Mercerizing, Carbonizing</td>
<td>Detergents, solvents, enzymes, bases, bleaches, acids</td>
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<tr>
<td>Dyeing and printing</td>
<td>Dyeing, printing, washing</td>
<td>Dyes, pigments, detergents</td>
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<tr>
<td>Finishing treatments</td>
<td>Handle modification, Crease resistance, Antistatic treatment, Anti pilling, Antibacterial/anti-odor treatment, water repellence, oil/soil repellence, Flame retardant, coatings, lamination, garment treatment for fashion purpose</td>
<td>Softeners (Polyethylene, quart, Ammonium compounds, silicones, polyurethanes) Stiffeners (starch, resins, Polyvinyl acetate, Polyvinyl alcohol), cationic softeners, polyglycols, resins, biocides, water repellents, waxes, fluorocarbons, halogenated and phosphor based flame retardants, Acrylates, potassium permanganate, sodium hypochlorite, calcium hypochlorite, sodium hydro sulphite, potassium dichromate, formaldehyde resins, cationic silicones</td>
</tr>
<tr>
<td>Manufacturing, transport, sales and retail</td>
<td>Transport preparation, protecting from mold during transport and storage</td>
<td>Biocides, halogenated substances</td>
</tr>
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**Table:**
- **Production/Manufacturing Step:** Fiber production, Yarn production, Fabric production, Pre-treatment, Dyeing and printing, Finishing treatments, Manufacturing, transport, sales and retail.
- **Processes:** Plant harvesting, Spinning, Weaving, Knitting, Non-woven, Washing, cleaning of the fabric, De-sizing, Scouring, Bleaching, Mercerizing, Carbonizing, Dyeing, printing, washing, Handle modification, Crease resistance, Antistatic treatment, Anti pilling, Antibacterial/anti-odor treatment, water repellence, oil/soil repellence, Flame retardant, coatings, lamination, garment treatment for fashion purpose, Transport preparation, protecting from mold during transport and storage.
- **Chemicals:** Pesticides, Insecticides, Fertilizers, Spinning oils, Sizing chemicals, lubricants, solvents, adhesives, binder, Detergents, solvents, enzymes, bases, bleaches, acids, Dyes, pigments, detergents, Softeners, Ammonium compounds, silicones, polyurethanes, Stiffeners, Polyvinyl acetate, Polyvinyl alcohol, cationic softeners, polyglycols, resins, biocides, water repellents, waxes, fluorocarbons, halogenated and phosphor based flame retardants, Acrylates, potassium permanganate, sodium hypochlorite, calcium hypochlorite, sodium hydro sulphite, potassium dichromate, formaldehyde resins, cationic silicones, Biocides, halogenated substances.
Basic chemicals

Colorants

Auxiliaries

As

Effect chemicals

Process chemicals

Dyes, Textile auxiliaries, Base chemicals, water

9.3 Mio Tons chemicals/annum

Wet processing (pre-treatment, dyeing, printing, finishing)

Water effluent

Emissions to air

solid waste/wastewater sewage sludge
Regulations of Chemicals, Standards, Certifications and Labeling Schemes

- EU REACH applying to all chemical substances used for both, industrial and consumer application

- The TSCA, the Toxic Substances Control Act in the US, introduced in 1976 and updated by the Frank R. Lautenberg Chemical Safety Act

- The China MEP Order 7, similar to EU REACH and known as China REACH.

Although the cited legislative regulations and initiatives restrict the use of chemicals in general, none of these regulations specifically address the use of chemicals in the textile industry.
Existing standards, labels and certifications pertinent to the textile industry from relevant organizations.
The way ahead......Contribution to the achievement of the objectives of a beyond 2020 framework by **private SCLs**

1. Highly hazardous pesticides
2. Chemical in Products
3. Endocrine-disrupting chemicals
4. Sound management of chemicals and waste
5. Nanomaterials in relation to secondary microplastics from textiles
6. PFOS and PFOA
Private SCLs have already contributed to the current 11 targets and can continue to support emerging issues that need to be addressed.

The ZDHC MRSL, the bluesign risk assessment and the AFIRM product focused approach seem the most relevant private standardization schemes which could serve as a model to contribute to the beyond 2020 strategy.

The minimum requirement is not a ceiling of SCL performance, but rather a floor.

SAICM could support upscaling of selected voluntary SCLs that meet minimum criteria through supporting expansion into other sectors, or new markets thereby strengthening its reach and adherence.
Could the United Nations label private standards fulfilling such minimal requirements label those as ‘UN approved’?

Based on the history of the UN’s initiatives with the private sector from the Global Compact onwards, it would be more appropriate that a UN logo is more indicative of a “best practice” as opposed to an approval or validation of the achievement of minimal criteria. At a high level, the UN can function more as an independent gatekeeper that ensures that a minimum criteria/scope of “best practices” among voluntary SCLs are recognized and encouraged.
By 2022, increased awareness of minimum requirements in all current and forecast textile and garments producing countries through the national focal points and global peer of experts.

By 2024, countries have analyzed and addressed obstacles to implementing SAICM-relevant elements of selected private standards within their national contexts (e.g. incoherent or contradicting sectoral policies pertaining to the sound management of chemicals and wastes).

By 2025, private sector associations effectively encourage (and support) their members to adhere to relevant private SCL schemes and abide to regulations pertaining to sound management of chemicals and wastes within that initiative.

By 2025, non-government organizations have included adherence to relevant private standards in their strategic outreach and actively address the issue in their communication with the private sector and governments.

By 2030, there is concrete harmonization of requirements among voluntary SCLs and their implementation/application in the global market.
How can the textile industry contribute to a post 2020 SAICM approach? Can the textile industry serve as a model? What are the recommendations?

Externally facilitated RT/Platform with all relevant stakeholder invited

- Same weight independent from size
- Independent body establishing and managing the minimum criteria setting process
- Global awareness of **minimum** requirements that can focus on the consumer end. (Use of textiles e.g is ubiquitous; SCL should focus on the identified current textile and garment producing countries)
Creating and supporting “MINIMUM” criteria

- Minimum SCL
- QA/QS system/manual
- Multistakeholder Approach
- Integration of upstream and downstream player
- Science based

Criteria established by International multi-stakeholder Advisory board

Safe chemistry targets
Support SAICM post 2020 “Best practice”
Thank you