Overview
Textile and ready-made garment manufacturing demands significant amounts of resources and generates unprecedented volumes of waste and effluents. In 2015, the global textile and clothing industry consumed 79 billion cubic meters of water, generated 1,715 million tons of CO$_2$ and 92 million tons of waste. More than 8,000 chemicals are needed in the various processes of the textile value chain and the World Bank estimates that 17-20% of industrial water pollution comes from dyeing and treatments given to fabrics.

Some of the chemicals used extensively in the textile sector are not only hazardous to the environment and humans, but also represent a major obstacle to textile recycling. Due to the rising global demand of textiles, raw materials, such as fibers, are becoming increasingly scarce and together with chemicals, they represent a critical cost factor for the textile industry. Nevertheless, growing consumer awareness of the environmental impact of textile production has created a rising demand for sustainably produced textiles and inspired global brands to analyze their supply chains for better alternatives including renewable and recycled fibers and cleaner production processes.

The United Nations Industrial Development Organization (UNIDO) has, in the framework of the EU funded SwitchMed Programme, demonstrated that investing in a resource efficient and cleaner production is not only good for the businesses, but also for the environment.

Over the past decade, UNIDO has built local capacities for industries in the Southern Mediterranean region to use resources more efficiently and to deliver products with a better environmental footprint through the MED TEST I and II projects.

Benefits for the textile sector
Beginning in the second half of 2019, the SwitchMed Programme will launch an initiative with a special focus on the industrial textile supply chains of Egypt, Morocco, and Tunisia. Together with international brands and key expert organizations, UNIDO will engage national stakeholders in the development of circular value chains for valorizing post-industrial and pre-consumer textile waste and move the textile industries towards adopting safer chemical protocols.

Actors in the local textile eco-systems could benefit by:

- Improving front-end cost savings, reducing environmental impact and lower costs associated with waste processing;
- Increasing the longevity of resources, reducing dependencies of limited virgin stock materials and retaining value in the local economy;
- Upgrading processes and operations of local SMEs along the textile supply chain that can increase the competitiveness of the eco-system to meet future market requirements;
- Reducing compliance cost, mitigation of environmental risks in day to day operations, and increasing transparency along the supply chain;
- New business opportunities through the development of new services, products and improved strategic supply chain relations.
Global demand for cotton and polyester, two of the most relevant fibers for the textile industry, is expected to grow with 40% by 2023, a growth rate that calls for alternatives to virgin materials. Cutting scraps, defective pieces, unsold collections, and second quality graded products from the fashion supply chain make out a significant amount of waste, but also represent an untapped resource that could fulfil the demands of a growing market for recycled fibers. Building local infrastructure, technical expertise and knowledge are pivotal for the development of circular value chains that can enable the valorization of the textile waste into value added products and ensure that the recycling processes also correspond to mitigated environmental impacts. Together with leading international brands, UNIDO will develop local capacities that can facilitate proper classification, efficient collection, sorting and recycling of post-industrial and pre-consumer textile waste aligned to global market needs.

Disclosure of safer chemicals protocols in textile manufacturing

Promoting the elimination of hazardous chemicals in textile production is a critical aspect of meeting consumer preferences for sustainably produced textile products. The fashion supply-chain in the participating countries has already advanced the use of safer chemicals. Now it is time to take a step forward in the disclosure and systemic compliance to leading chemical protocols.

In collaboration with the ZDHC Foundation, UNIDO will demonstrate and build local capacities in Morocco, Tunisia and Egypt for the implementation of safer chemical management practices that can protect consumers, workers, the environment, and help increasing environmental responsibility in the textile and garment sector.