EROGLU GARMENT

SUSTAINABILITY NEWSLETTER
FEBRUARY 2026 | ISSUE 4

FROM WASTEWATER TO RESOURCE IN DENIM: THE IMPORTANCE OF RECYCLING

Sustainability in denim production requires the responsible and holistic management of resources.

Sustainable denim production is shaped not only by product quality, but also by how the resources used throughout the manufacturing process are managed. With water at the center of this process, wastewater treatment and reuse practices have become an integral part of production. An effective treatment infrastructure helps control environmental impacts while enabling the circular use of water.

Denim production is inherently a water-intensive manufacturing process. Throughout wet processing stages such as cotton fiber preparation, dyeing, and washing, water is used both as a key production input and as a critical element in achieving the desired product quality.

Scientific life cycle assessments indicate that water use accounts for a significant share of the overall environmental footprint of denim products. Therefore, the effective treatment of wastewater generated during production, along with its recovery wherever possible, has become one of the key elements of sustainable denim manufacturing.

The global textile and apparel industry consumes approximately **79–93 billion m³** of water annually, accounting for about **4%** of global freshwater withdrawals.

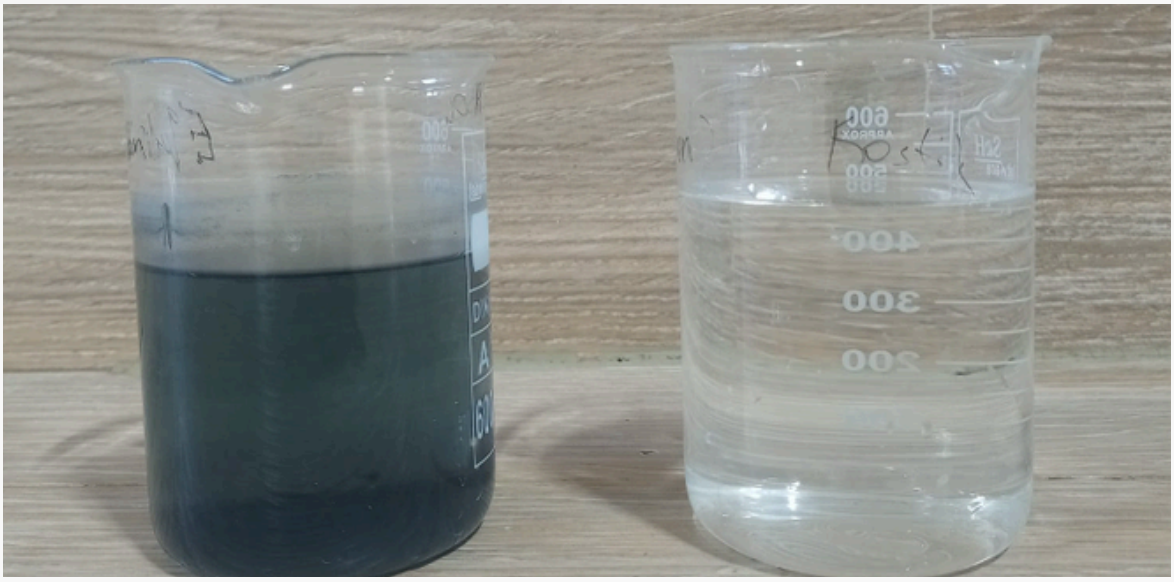
This water use occurs across a wide range of the production chain, from cotton cultivation to wet processing stages such as dyeing and finishing. In light of increasing pressure on water resources and the growing global need for conservation, how water is managed in textile manufacturing has become a critical area of focus. In this context, the effective treatment and reuse of wastewater generated during production stand out as key components of a responsible manufacturing approach.

HOW DO WE MANAGE OUR WASTEWATER AT EROGLU GARMENT?

At our facility, our sustainable water management approach is built on an integrated system that supports production efficiency while aiming to reduce environmental impacts. Throughout our production processes, efficient and environmentally friendly technologies are utilized to minimize energy, water, and chemical consumption; this approach is further strengthened by water recovery practices.

Wastewater generated from denim production is effectively treated through mechanical, biological, and chemical processes at our on-site treatment facility. This multi-stage system enables effective control of the pollutant load, while biological treatment helps reduce the need for chemical usage and minimizes the amount of sludge generated.

Following the treatment processes, approximately **60%** of the treated water is recovered through a Reverse Osmosis (RO) system and reused within our operations. This practice reduces the need for freshwater while contributing to the conservation of water resources and supporting the wider adoption of circular water use in production.



WITH OUR PRODUCTION APPROACH FOCUSED ON CONSERVING AND RECOVERING WATER, WE CONTINUE TO CREATE VALUE IN EVERY DROP FOR SUSTAINABLE DENIM.