

Committed to Sustainability.

At DyStar, our products and services help customers worldwide reduce costs, shorten lead times and meet stringent quality and ecological specifications.



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Decarbonization of the Textile Supply Chain

Guide for Brands and Retailers, and other Stakeholders

Sustainability Strategy at DyStar Group

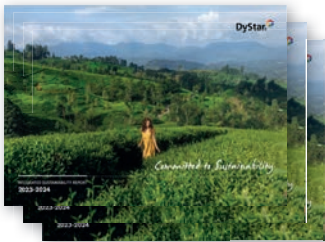
Sustainability is our commitment at DyStar Group, both in how we run our own organization, our production, logistics, as well as in the products and services we offer to brands, retailers and their industry partners. Since 2011, we have been publishing an annual Sustainability Report, available on our website.

Sustainability – A Two-Fold Sustainability Strategy

1. Reduce Our Operational Impact

- Established Sustainability governance structure
- Measured social & environmental performance – Sustainability Reporting
- Implemented emission reduction strategies
- Committed to reduce our footprint in water, waste, energy and GHG

Annual Integrated Sustainability Report in accordance with the Global Reporting Initiative (GRI)



2. Help Our Customers Reduce Their Impact

- Foundation of **econfidence**
- **Product stewardship**
Reliability in all quality aspects including **eco-performance**
- **Sustainable Product Innovation**
- **Sustainable Processes (Cadira®)**

econfidence®

DyStar’s econfidence program provides assurance to our textile customers that the dyes and chemicals we supply, comply with legal requirements e.g. REACH. It also ensures that recommended products are cleaner and compliant with voluntary specifications like Brand & Retailer RSL (Restricted Substance List) requirements. Our key external certifiers are bluesign®, ZDHC and GOTS®. You can easily find our Positive Lists in eliot®.

eliot®

The eliot® online tool is a digital library featuring interactive tools. It provides efficient information across 8 easy-to-use modules, accessible with just a mouse click. You may access it via <https://eliot.dystar.com/eliot/main/main.jsp>

Bio-Based Products

Bio-based products are wholly or partly derived from renewable raw materials such as plants or animals, and exclude materials embedded in geological formations or fossilized material i.e., fossil fuel derived products.

From Crude Oil to Biomass – The Benefits:

- Bio-based products can lower the environmental impact by using renewable feedstocks
- Using bio-based products lowers the dependence on fossil fuels, which is a finite resource
- Bio-based products support a circular economy

The full products list is available in eliot®

Vegan Products

Vegan products are organic textile colorants, pigments, and auxiliaries which are free of components of animal origin.

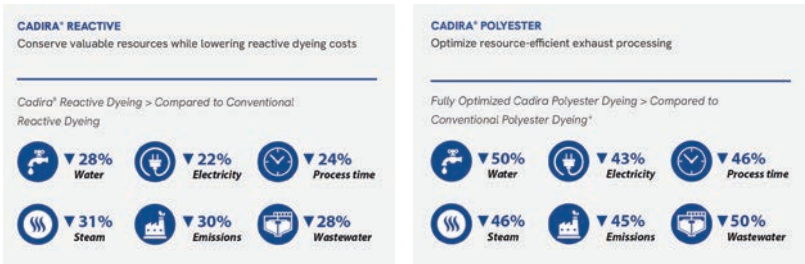
The full range is available in eliot®.

Cadira® Concepts

DyStar’s experts have compiled extensive application know-how into innovative, resource-saving dyeing and printing processes, and launched them as the Cadira concepts.

The name *Cadira* stands for Carbon Dioxide Reduction and that is exactly what can be achieved with these modules. All Cadira modules help to reduce the consumption of energy, water, waste and greenhouse gas emissions.

Currently, there are 10 Cadira modules available.



* Actual reductions may vary. Figures presented in the diagram represent the best-known performance results.

Optidye® Programs

Optidye Programs are software to calculate the exact dyeing parameters.

The final dyeing recipe can further be optimized by using our exclusive *Optidye® programs*.

Depending on the type of fiber, Optidye programs help to reduce dyeing cycles and operating costs, reduce additions and shading operations, improve the quality of dyed articles, and help to reduce effluent load and carbon footprint. Optidye programs can help to optimize the Right First Time rate of your production.

eliot Contains 5 Optidye Programs

- Optidye CR-Exh** → Recipe optimization for reactive dyeing in exhaust processes
- Optidye CR-CPB** → Parameter optimization for Cold Pad Batch dyeing
- Optidye PES** → Process optimization for polyester dyeing in exhaust processes
- Optidye N** → Process and chemical optimization for polyamide dyeing in exhaust processes
- Optidye CI** → Chemical optimization for Indanthren® dyeings in exhaust and continuous processes



Innovative Application Technology

Digital Dyeing

DyStar recipes run on imogo dyeing and finishing systems, Dye-Max and F-Max.

Dycon HF Continuous Pigment Dyeing, on Conventional and Innovative Equipment

Lower water and energy consumption, less effluent and lead-times in production.

Pigment Digital Printing with Jettex® P

By eliminating pre- and post-treatment, water, energy and up to 80 % CO₂ emissions can be saved.

Reactive Digital Printing with Jettex R EcoFix

Reducing alkaline, fixation and wash-off time, water consumption, effluent, as well as eliminating urea.

Revolutionary Continuous Polyester Spray Dyeing with Energy Reduced Thermofixation

Energy saving revolutionary Continuous Spray Dyeing on Weko RotaDyer machines for Cotton using Weko PS2 process with Indanthren® and Remazol®/Levafix® dyes or on Polyester with Dianix® dyes in a new thermofixation process.

Eco-Advanced Indigo Dyeing

Reducing water usage up to 90 % and energy consumption up to 30 %.