

# Ø ZDHC

## The Roadmap To Zero Programme

### Signatory Brands:



### Value Chain Affiliates:



### Associates:





# Contents

A bit of History - the ZDHC Roadmap to Zero Programme and its Objectives	4
The ZDHC Focus Areas	5
ZDHC Manufacturing Restricted Substances List (ZDHC MRSL)	6
ZDHC Gateway - Chemical Module	8
ChemCheck	9
InCheck	9
ZDHC Wastewater Guidelines	10
ZDHC Gateway - Wastewater Module	12
ClearStream	13
ZDHC Chemical Management System (CMS) Manual	14
ZDHC Academy	15
ZDHC Implementation HUB	16
How it all connects	17
Join Us As a ZDHC Contributor	18



Our **mission** is to enable brands and retailers in the textile, apparel, and footwear industries to implement sustainable chemical management best practice across the value chain. Through collaborative engagement, standard setting, and implementation, we will advance towards zero discharge of hazardous chemicals.

Our **vision** is widespread implementation of sustainable chemistry, driving innovations and best practices in textile, apparel, leather and footwear industries to protect consumers, workers and the environment.



---

## A bit of History - the ZDHC Roadmap to Zero Programme and its Objectives

---

In 2011, the ZDHC Roadmap to Zero Programme began as a coalition of six brands and those brands committed to a Joint Roadmap, in which they outlined their future activities.

In 2014, the ZDHC Manufacturing Restricted Substances List (ZDHC MRSL) Version 1 was released, along with Chemical Guidance Sheets. Updated in December 2015, the ZDHC MRSL version 1.1 also included leather and coated fabrics.

In 2015, the ZDHC Joint Roadmap was updated and ZDHC transitioned to management under a legal entity established in the Netherlands –

the ZDHC Foundation. The clearly established vision for the ZDHC Foundation is widespread implementation of sustainable chemistry, driving innovation and best practices in the industry to protect consumers, workers and the environment.

Also in 2015, Focus and Cross Cutting Areas were formed in order to optimise impact and complement the work of other industry associations and non-governmental organisations. In 2017, these focus areas were restructured to enable a more holistic approach and tackle all parts of the global textile, leather and footwear value chain.



## The ZDHC Focus Areas



### INPUT

The Input Focus Area works on tools and services that are the cornerstone of the ZDHC Roadmap to Zero Programme - those that seek to change the way products are made by restricting input chemicals rather than trying to eliminate them in effluents and products.



### PROCESS

The Process Focus Area works on projects related to good chemical management practices and harmonised supply chain implementation of ZDHC tools.



### OUTPUT

The Output Focus Area works on those areas designed to support and verify the work of all Areas.

# The ZDHC Manufacturing Restricted Substances List (ZDHC MRSL)

The ZDHC Manufacturing Restricted Substances List (ZDHC MRSL) is a list of chemical substances banned from intentional use in facilities that process textile materials, synthetic leather, leather, and trim parts in textiles and footwear. By using chemical formulations that conform to ZDHC's MRSL suppliers can assure themselves, and their customers that banned chemical substances are not intentionally used during the production.

Conformance with the ZDHC MRSL is an important part of a holistic chemical management approach that will help to drive sustainable chemistry and the reduction of hazardous chemical discharge into the environment. In June 2017 the ZDHC MRSL Conformance Guidance which is intended for use by chemical suppliers, brands, material suppliers, product finishers, and certification bodies was published.

The ZDHC MRSL Conformance Guidance provides chemical suppliers with an indication system to assess the extent to which a chemical formulation conforms to, or meets, the requirements of the ZDHC MRSL.

ZDHC MRSL conformance levels range from 0 to 3 as seen in Figure 1. These levels provide a buyer of chemical products a level of confidence that indicates how any given chemical product conforms to the ZDHC MRSL. The higher the conformance level, the more extensive and thorough the review of the chemical formulation and its producer.

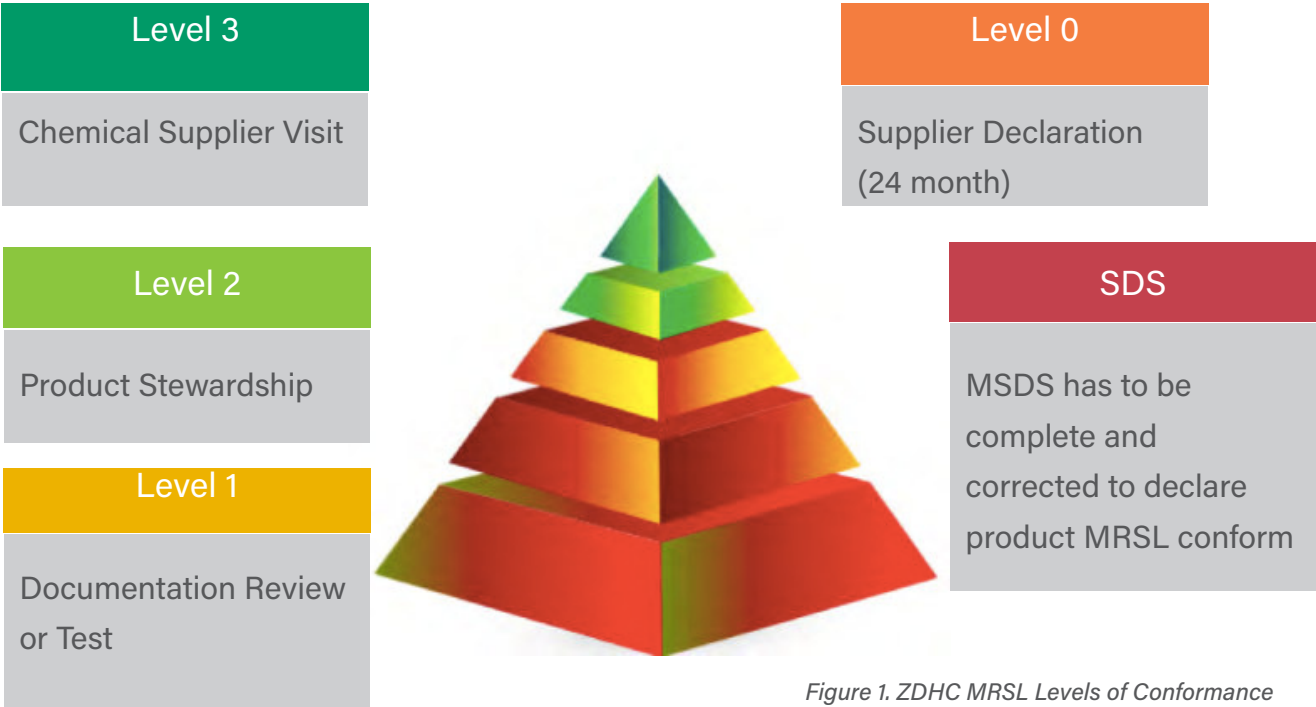



Figure 1. ZDHC MRSL Levels of Conformance



Conformance with the ZDHC MRSL is an important part of a holistic chemical management approach that drives sustainable chemistry and the reduction of hazardous chemical discharge into the environment.

To accelerate the global impact of ZDHC's Roadmap to Zero Programme ZDHC decided at a very early stage not to start its own certification system for ZDHC MRSL conformant chemistry but instead to leverage existing certification as indicators of ZDHC MRSL conformance.

ZDHC leverages credible and approved third-party certification systems to create an indication of ZDHC MRSL conformance. An integral part of the indication system takes the form of certificates from ZDHC accepted third-parties or acceptable analytical test results. It also describes the criteria that certification bodies must meet in order to be accepted by ZDHC as an indicator of ZDHC MRSL conformance.

To the end of July 2018 there are the following ZDHC Accepted Certification Standards:

- **BLC Chem-MAP** as Level 1 and 3 indicator
- **bluesign® bluefinder** as Level 3 indicator
- **Clean Production Action's (CPA) GreenScreen Certified™ Standard for Textile Chemicals** as Level 1 indicator

- **Control Union** as Level 1, 2 and 3 indicator
- **ECO PASSPORT by OEKO-TEX® Programme** as Level 1 and 3 indicator
- **Global Organic Textile Standard (GOTS)** as Level 1 indicator
- **NimkarTek Detox Laboratory (NDL)** as Level 1 indicator
- **NSF International** as Level 1 indicator
- **SciveraLENS®** as Level 1 indicator
- **ToxServices Full Materials Disclosure™ (ToxFMD™) Programme** as Level 1 indicator
- **TÜV Rheinland** as Level 1 testing indicator

More third party certification systems are in the process of being considered for acceptance as ZDHC Accepted Certification Standards.



Ø ZDHC

Gateway™

Chemical Module

## Sustainable Chemistry Starts at Source

### The World's First Open Database of Safer Chemistry for the Leather, Textile and Footwear Industry

The creation of the ZDHC Manufacturing Restricted Substances List (ZDHC MRSL) was hailed as an industry milestone towards sustainable chemical management. However, textile, leather and footwear manufacturers (suppliers) struggle to know how to assess, and where to go, to source safer chemistry.

Until now suppliers needed to undertake a painstaking and time consuming process of evaluating every product from each of their chemical suppliers against the ZDHC MRSL. The ZDHC Gateway - Chemical Module is an easy to use, online search tool that shows the level to which a chemical buyer can be confident a product conforms with the ZDHC MRSL.

The ZDHC Gateway - Chemical Module is based on third-party product certification standards and analytical test reports from laboratories. A high level of conformance indicates a high level of confidence that the chemical formulation conforms to the ZDHC MRSL.

The ZDHC Gateway - Chemical Module's low barrier to entry allows chemical manufacturers and formulators of all sizes, to register their chemical products and demonstrate conformance to the ZDHC MRSL.

Chemical companies pay an annual fee to have their formulations listed and will be responsible for keeping information regarding products and accreditations current.

Users of the ZDHC Gateway - Chemical Module are able to search and identify specific formulations, product listings, and access ZDHC MRSL related accreditations.





---

## Confidently Assure Chemical Conformance to the ZDHC MRSL

---



The ZDHC ChemCheck is a ZDHC MRSL Conformity Certificate specifically for formulators to use to communicate to their customers. Once chemical product information has been verified by ZDHC against the relevant ZDHC Accepted Certification Standard, formulators are able to generate the certificate directly from the Chemical Module. A ZDHC ChemCheck report enables formulators to easily provide their customers with the assurance that the product has been verified to the ZDHC Conformance Standard and is available in the ZDHC Gateway - Chemical Module.

A ZDHC ChemCheck certificate is a downloadable product profile that can be printed or shared electronically via PDF. It includes:

- Product summary, including ZDHC MRSL Conformance Level with description of the respective level
- Manufacturer summary
- Certifications and SDS summary, listing individual product certifications and their verification status
- Proof of authenticity with a unique stamp, digitally signed by ZDHC

ZDHC ChemCheck reports will be available as part of the formulator standard product registration fee. By leveraging this certificate, formulators can assure their customers that they are a leader in the drive towards transparency and the adoption of safer chemicals.



Textile, leather and footwear suppliers know that excellent chemistry starts at the source, however, they may find it challenging to communicate their conformance efforts and success to their customers. The ZDHC InCheck report, a new universally-accepted chemical inventory standard for input stream management, is an easy to read report of chemical inventory that provides suppliers with a benchmark score of their ZDHC MRSL conformance. ZDHC InCheck reports evaluate a number of factors across the products against chemical formulators, and calculates a score that summarises those factors for customers.

A ZDHC InCheck report can be printed or shared electronically via PDF with customers and other stakeholders. It will be available from mid 2018 through the ZDHC InCheck Tool in the ZDHC Gateway - Chemical Module.

ZDHC InCheck reports are digitally signed by ZDHC, proving authenticity, and providing a universal way for suppliers to check and understand their level of ZDHC MRSL conformance. Suppliers will get clear results and guidance to improve the quality of their chemical inputs, assure their customers of ZDHC MRSL conformance and grow their business.

---

# **Globally Recognised Industry Guidelines for Water Stewardship that go Beyond Regulatory Compliance**

---



# The ZDHC Wastewater Guidelines

The ZDHC Wastewater Guidelines define a single, unified expectation for wastewater testing that goes beyond regulatory compliance. Covering not only conventional wastewater parameters, but they are also the first guideline to define pass and fail criteria for hazardous chemicals covered in the ZDHC Manufacturing Restricted Substances List (ZDHC MRSL). Testing in accordance to the ZDHC Wastewater Guidelines validates whether or not chemical substances in the ZDHC MRSL are being used intentionally.

There are two set of parameters covered in the ZDHC Wastewater Guidelines:

**1) Conventional Parameters** limit values are set at the following three levels:

**Foundational:** At a minimum, meets legal discharge requirements and ensures effective control of input chemistry.

**Progressive:** Demonstrates increasing knowledge of chemical management and applies advanced wastewater treatment processes.

**Aspirational:** Demonstrates best-in-class performance and strives for continuous improvement in both chemicals and wastewater treatment process knowledge.

This 3 level approach allows for and is intended to support incremental improvement.

**2) ZDHC MRSL Parameters**, also referred to as Priority Hazardous Chemicals. These parameters are the primary focus of ZDHC. Rather than set a three level approach, a pass/fail criteria has been set. Four leading global laboratories collaborated in the development of these reporting limits to ensure that robust test methods are used worldwide. To find out more about sampling points, testing requirements and frequency of testing and reporting, please refer to the ZDHC Wastewater Guidelines.





---

## Preventing Wastewater Contamination Begins with Safe Chemistries

---

Production processes in the textile, leather and footwear industries often involve the use of a large quantities of water and chemical substances. If not properly treated, the resulting effluent can present a threat to people and to the environment.

The ZDHC Roadmap to Zero Programme recognises the value of addressing hazardous substances that may be discharged into the environment during the manufacture of materials used in the textile, leather and footwear industry. Together with leading brands, governments and other multi-stakeholder organisations we created the most comprehensive and unified guidelines for wet processing facilities across the entire value chain. The ZDHC Wastewater Guidelines, which go beyond regulatory compliance, are designed to ensure that the discharge of treated wastewater does not adversely affect the environment and surrounding communities.

The ZDHC Gateway – Wastewater Module is a global web-based platform that is designed to share verified wastewater and sludge test data based on testing against the ZDHC Wastewater Guidelines. It provides suppliers (manufacturing facilities) with an easy way to disclose secured and verified wastewater and sludge data to their clients (brands/retailers), reduce the number of unnecessary testing and instead focuses on improving the quality of discharge.



# The New Industry Guidance for Output Control

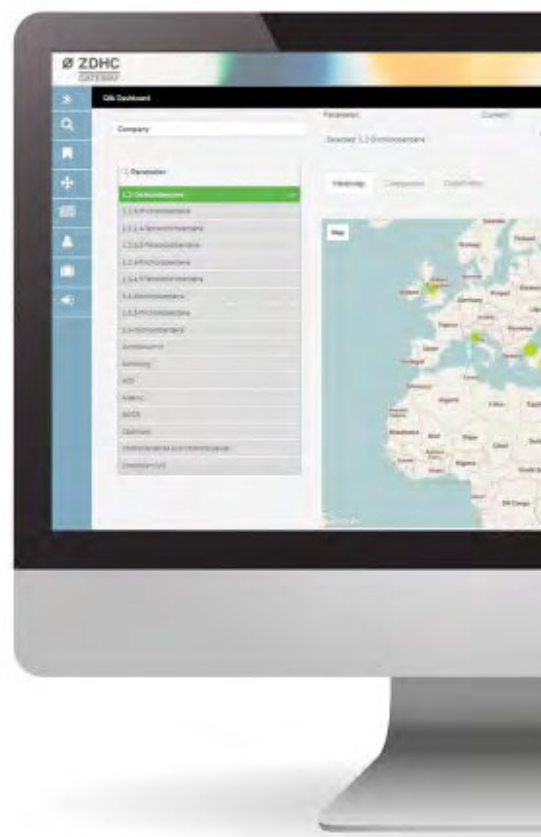


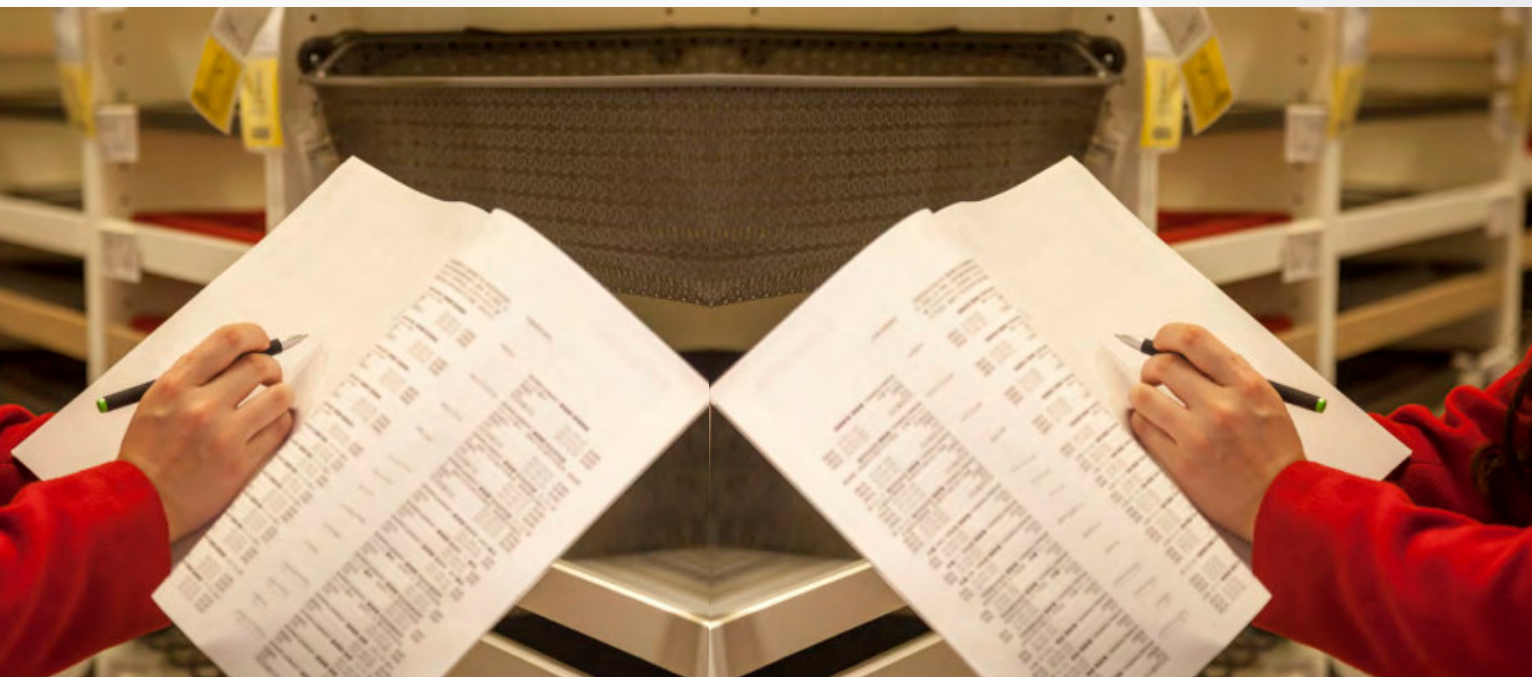
Production in the textile, apparel, footwear and leather industry can adversely affect a large quantity of water, which can threaten the environment, workers and surrounding communities. Good water stewardship involves regular monitoring and testing of wastewater in line with local and industry standards. Suppliers may find it challenging to interpret and communicate their wastewater test results. The ZDHC ClearStream, a universally accepted wastewater reporting standard for output control, helps suppliers to understand their test reports and demonstrate their performance to customers.

A ZDHC ClearStream report can be generated from any verified wastewater test results uploaded to the Wastewater Module by a growing number of ZDHC Accepted Laboratories worldwide. The scorecard shows wastewater performance in the context of the ZDHC Wastewater Guidelines and provides clear guidance on opportunities for improvement in an easy-to-read, non-technical format. ZDHC ClearStream reports highlight:

- The performance in line with the ZDHC methodology
- Opportunities for improvement
- Detailed results from ZDHC Accepted Laboratory test reports in the context of the ZDHC Wastewater Guidelines and scoring methodology

The ZDHC ClearStream report is digitally signed by ZDHC, proving authenticity and demonstrating transparency with reliable, verified wastewater data. Suppliers will have a straightforward way for themselves and their customers to understand their laboratory's wastewater test results, and position their company as a leader in a drive towards environmental and community safety.





---

## The ZDHC Chemical Management System (CMS) Guidance

---

The ZDHC Audit Protocol tool provides brands with the capability to initiate, and self-assess and improve safe handling of chemicals with objectives at foundational, progressive and aspirational levels. Supported by the ZDHC Chemical Management System (CMS) Guidance, the ZDHC Audit tool has been used by ZDHC Contributors since its release.

In 2015 ZDHC decided to pursue convergence of the ZDHC Audit Protocol tool with the Sustainable Apparel Coalition (SAC) Higg Facility Environmental Module (FEM).

Our aim is to ensure the creation of one consistent set of chemical management assessment protocols to evaluate manufacturers' chemical management across their value chains.



---

# The ZDHC Academy

---

## Creating Awareness and Empowering the Value Chain with Knowledge and Skills

The ZDHC Academy is positioned to be the global training platform for sustainable chemical management and ZDHC tools in the textile, apparel, leather and footwear industry.

It was established in 2016 to build capacity along the textile and leather value chain on sustainable chemical management and the effective implementation of tools such as the ZDHC Manufacturing Restricted Substances List (ZDHC MRSL) and Wastewater Guidelines. The Academy is designed to empower brands, retailers, manufacturers and policy makers to receive certified training to improve their knowledge and practice of environmental management.

The training modules are specifically developed to meet the knowledge requirements of leather, textile, apparel and footwear value chains. The sessions currently on offer include modules on chemical management, top practical issues and webinars on

ZDHC MRSL conformance and the ZDHC Wastewater Guidelines.

The training sessions are conducted in person by vetted and approved ZDHC Accredited Training Providers to assure highest quality and consistency of trainings.

Additional content modules and extended formats of learning, such as Training of Trainers and online training will be launched in 2018.

The ZDHC Academy offers courses in a range of countries and in local language. Sessions are currently available in Italy, Portugal, Spain, Turkey, Bangladesh, Pakistan, India, China and Vietnam. Further countries will be added based on learning needs.

**The ZDHC Academy is available via: <https://zdhc.fta-intl.org>**



---

## The ZDHC Implementation HUB

---

### Enabling Implementation at Scale and Accelerating Impact Along the Value Chain

The ZDHC Implementation HUB is set up to drive large-scale uptake of chemical and environmental management best practices across the textile, apparel, footwear and leather industry.

To drive the transformation of these sectors, the HUB provides holistic and tailored offerings for brands, retailers and manufacturers in the areas of baselining, strategic planning and implementation. These services are conducted by ZDHC-accredited experts to assure the highest level of competency and quality.

As such the HUB fulfils four functions:

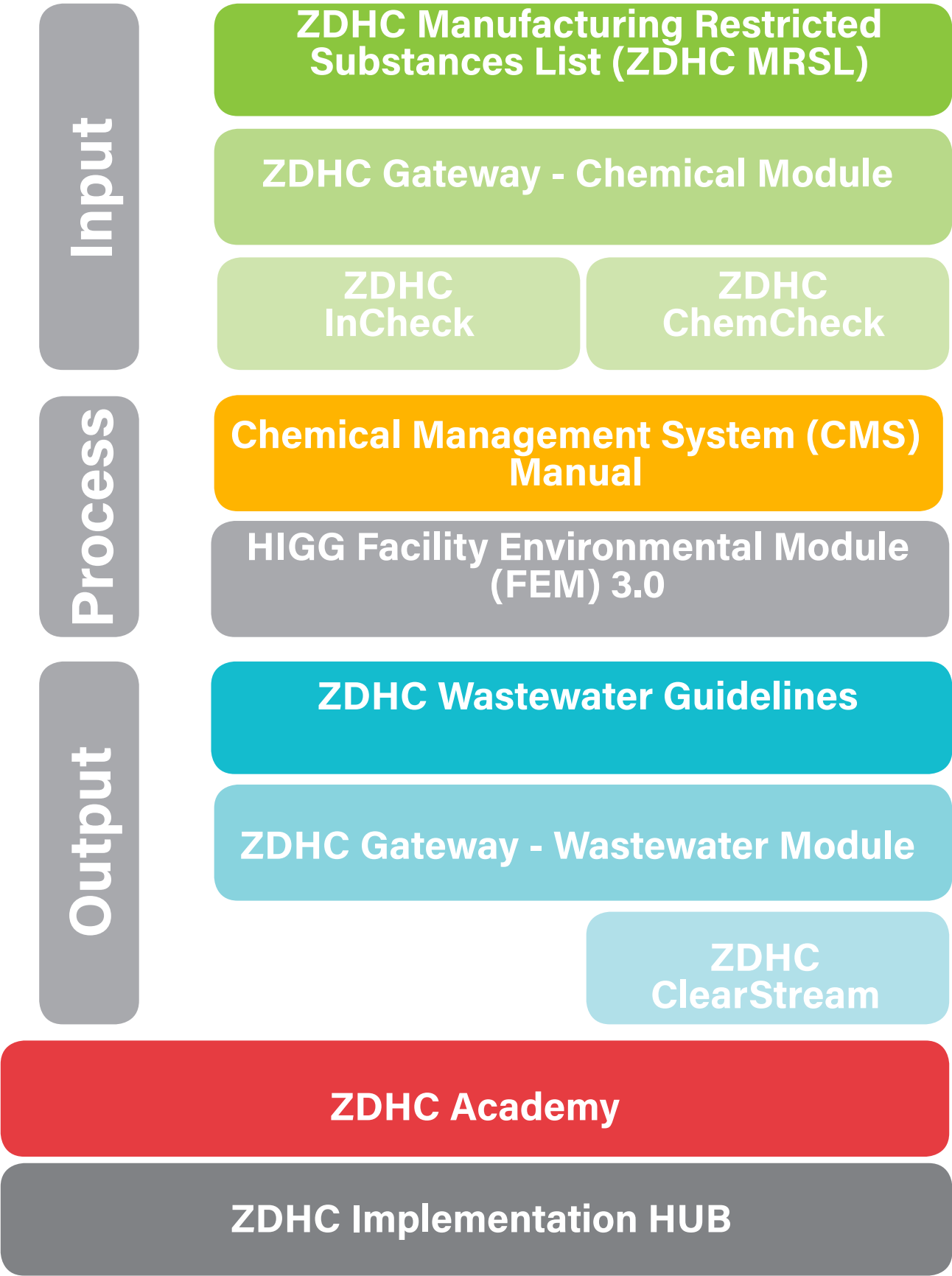
- it offers a platform to find and match with accredited experts for ZDHC-centric projects
- it supports the continuous progress under the ZDHC Leader Programme
- it provides a piloting environment for scalable innovation scenarios
- it enables large-scale implementation projects

The ZDHC Implementation HUB is incorporated in the Netherlands with local activities worldwide. This setup ensures best anchoring of services in the specific country context as well as meaningful impact in the global supply chains.





# How it All Connects





---

# Join as a ZDHC Contributor?

---

As a ZDHC Contributor you can be part of driving the development and implementation of the ZDHC Roadmap to Zero Programme and participate in the Leader Programme.

## The Leader Programme

At the heart of the Roadmap to Zero Programme is the newly developed ZDHC Leader Programme. The objective of the Leader Programme is to help the global textile, leather and footwear industry to clearly understand ZDHC tools, how to effectively and consistently implement them and how to measure progress. Based on foundational, progressive and aspirational key performance indicators and related metrics the Leader Programme will accelerate impact, drive tangible improvements and enable programme progress. Initially developed for ZDHC Signatory Brands the leader programme will be developed and extended for facilities in 2018/19.

## Collaborate

- Work as part of a collaboration, developing and implementing ZDHC products and tools, standards and guidance

## Share Best Practices & Access Expertise

- Access peer and expert input.
- Gain support and best practice sharing on implementing ZDHC tools and standards.
- Gain early access to research, tools and the creation of implementation metrics.
- Share data on common suppliers.

## Lead the Industry

- Be recognised as a leader in responsible chemical management.
- Stay ahead of legal and regulatory developments with regards to chemical management.
- Accelerate commitment to and adoption of next generation chemical management.

## Network

- Share with, and learn from, all parts of the value chain.
- Engage with a diverse range of leading civil society organisations and stakeholders.

## Improve the Bottom Line & Profitability

- Increase competitiveness - grow business and markets through new product innovation.
- Boost productivity and profit.
- Reduce costs e.g. saving time and money.
- Reduce risks e.g. stay ahead of legal requirements on chemical management.
- Drive efficiency and innovation e.g. reduce assessment burden, avoid duplication and supplier fatigue, and increase supplier engagement.

---

## Collaboration is Key!

---

Join us and work as part of an exciting collaboration, developing and implementing ZDHC guidelines and tools.

### We are seeking to collaborate with organisations that:

- Have a clear public mission primarily focused on improving social and/or environmental conditions and having positive impact;
- Align with and share the mission, vision and goals of ZDHC;
- Agree with the power of collaboration to drive industry wide improvements;
- Contribute non financial resources to work activities - in the ZDHC Programme;
- Have in-house expertise on chemical management; and
- Have an RSL and a written implementation process.

### What are the next steps?

- 1) Application form, including signing of a Joint Roadmap commitment and important legal documentation.
- 2) Approval by ZDHC.
- 3) Onboarding and integration into ZDHC Programme and systems.

### Interested in learning more about ZDHC?

Contact us: [contribute@zdhc.org](mailto:contribute@zdhc.org)

### Want to learn more about the programme?

Visit

[www.roadmaptozero.com](http://www.roadmaptozero.com)







**Stichting ZDHC Foundation**

Watersteeg 3

1012 NV Amsterdam

The Netherlands

[www.roadmaptozero.com](http://www.roadmaptozero.com)