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# Annual Report 2021

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# Contents

|   |    |
|---|----|
| Executive Director's Letter               | 3  |
| ZDHC Contributor Growth                   | 5  |
| Key Highlights from 2020                  | 7  |
| Roadmap to Zero Programme:                |    |
| Our Progress in 2021                      | 9  |
| Roadmap to Zero 2021 Activities           | 11 |
| Roadmap to Zero 2022 Planned Activities   | 14 |
| ZDHC Gateway Highlights                   | 16 |
| Overview Numbers                          | 16 |
| Chemical Module                           | 17 |
| Wastewater Module                         | 19 |
| ZDHC Gateway Joint Modules                |    |
| Achievements 2021                         | 20 |
| Regional Highlights                       | 22 |
| East Asia                                 | 22 |
| South Asia                                | 24 |
| Southern Europe                           | 26 |
| Partnerships and Collaborations           | 28 |
| Highlights from the Implementation HUB    | 35 |
| Implementation Projects Worldwide         | 44 |
| Highlights from the Customer Support Team | 46 |

# Executive Director's Letter

The year 2021 has been a year of growth and transformation for the ZDHC Foundation. Steering through the COVID-19 pandemic, we have continued to grow in leaps and bounds. As life slowly begins to return to normal, and things seem to be turning for the better regarding the pandemic, the urgency for action in response to the climate crisis remains critical. This year, we entered the final decade that offers us a chance to turn back the clock before our environmental crisis goes beyond repair.

There is no simple or easy solution to the climate crisis. Only collective collaboration and collective action can deliver us to a final solution to drive change that is now so urgently needed. This is why we are pleased to see our regional representations become increasingly significant as we accelerate our implementation within our regional competence centres; climate change, water stewardship, circularity, and biodiversity. We are also pleased to see a persistent increase in uptake of value chain efforts between brands and suppliers in accelerating the implementation of ZDHC guidelines, platforms and solutions.

This year, 16 new Contributors and 11 new Friends of ZDHC joined the ZDHC Community, affirming and supporting our positive impact in eliminating hazardous chemicals from the global value chain. Alongside the consistent rise in our Contributorship, we have had a positive gain in independence from Contribution fees this year. This has been achieved through our platforms like the Gateway, that enable Contributors and non-Contributors alike to use and implement our Roadmap to Zero Programme worldwide.

To further drive the ZDHC strategy, the appointment in 2021, of seven Board Directors represents one of our most diverse Board compositions yet, comprising Brand Representatives, Chemical Suppliers and Manufacturers. With the 2021 Board election, female representation also grew to a quarter of its composition. We will continue to prioritise further diversification in the coming years. Our board members are voted as individuals and on the merit of their expertise alone. Therefore, when serving on the Board, the Board members do not represent the organisation they work for and solely act in the interest of the ZDHC Foundation. With the 2022 Board election, we will introduce a seat for an individual from an Academic Institution.

# Executive Director's Letter

In 2021, the ZDHC Foundation also took its collaborative efforts with the Apparel Alliance a step further. The Apparel Alliance is a partnership between the Apparel Impact Institute, Sustainable Apparel Coalition, Textile Exchange, and the ZDHC Foundation. Together, the member organisations encompass all stages of the apparel and footwear value chain and eliminate duplication to instead create a holistic facilitation journey for the industry. The aim of this alliance is to work together to achieve a minimum goal of 45% reduction in GHG emissions by 2030, and to direct the industry toward the seven interventions identified in the most recent "Roadmap to Net Zero Report"<sup>1</sup> from the World Resources Institute and Apparel Impact Institute.

We continue to invest in the credibility of our organisation through providing thought leadership within the industry and holding our contributors accountable. In the coming year we will strive to continually increase transparency of the implementation performance of our contributor community and stage their progress on the joint journey publically.

As our Roadmap to Zero Programme gathers momentum around the globe, we recognise that real change can only happen when we jointly move together. With a clear vision and a steady hand, we will ensure that this continues. Looking at the growth and independence that ZDHC has achieved even through unprecedented times, I can confidently and proudly say that there will be more to commend and improve in the years to come.



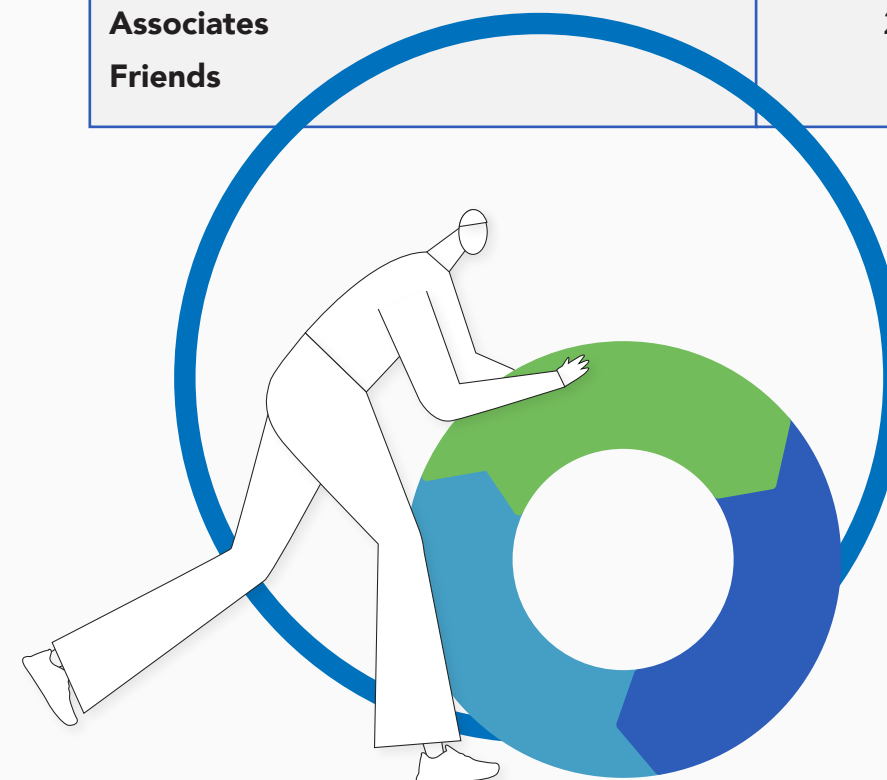
**Frank Michel**  
Executive Director

<sup>1</sup> Report available on [www.apparelalliance.org: https://files.wri.org/d8/s3fs-public/2021-11/roadmap-net-zero-delivering-science-based-targets-apparel-sector.pdf?VersionId=LxrwUSv9dHytM7zybuQgoJ8LUHBZVgM1](https://files.wri.org/d8/s3fs-public/2021-11/roadmap-net-zero-delivering-science-based-targets-apparel-sector.pdf?VersionId=LxrwUSv9dHytM7zybuQgoJ8LUHBZVgM1)

# ZDHC Contributor Growth

| Brands  | VCA - Textile Industry   | Friends  |
|---|--|--|
| <ul style="list-style-type: none"> <li>MANGO</li> <li>OTB Group</li> <li>River Island</li> <li>Teddy Spa</li> <li>TENDAM</li> </ul> | <ul style="list-style-type: none"> <li>Asahi Kasei - Bemberg Div.</li> <li>Atlas Export Enterprises</li> <li>Century Rayon</li> <li>Hayleys Fabric PLC</li> <li>HERMES CUIRS PRE-CIEUX</li> <li>Kelheim Fibres</li> <li>Spinnova</li> <li>TreeToTextile</li> </ul> | <ul style="list-style-type: none"> <li>Aditya Birla Retail and Fashion</li> <li>BAM Bamboo Clothing</li> <li>Brooks Running</li> <li>Detsky Mir</li> <li>John Lewis</li> <li>Kohl's</li> <li>lululemon athletica inc</li> <li>Superdry</li> <li>Zimmermann Wear Pty Ltd.</li> <li>ZXY International</li> </ul> |
| VCA - Chemical Industry   | Associate  |  |
| <ul style="list-style-type: none"> <li>Fineotex Chemicals Limited</li> <li>SOHAN INDUSTRIES</li> </ul>                              | <ul style="list-style-type: none"> <li>IDH</li> </ul>  |  |

|                              | 2020 | 2021 |
|------------------------------|------|------|
| <b>Brands</b>                | 30   | 34   |
| <b>VCA Chemical Industry</b> | 50   | 50   |
| <b>VCA Textile Industry</b>  | 36   | 42   |
| <b>VCA Solution Provider</b> | 30   | 25   |
| <b>Associates</b>            | 22   | 18   |
| <b>Friends</b>               | 7    | 18   |

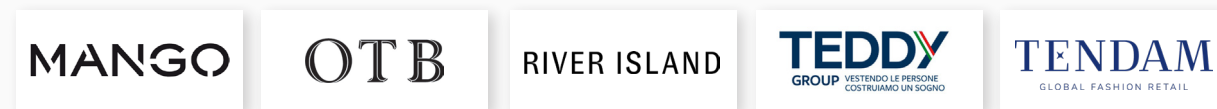




# ZDHC Contributor Growth

In 2020, ZDHC welcomed the following organisations:

## Brands

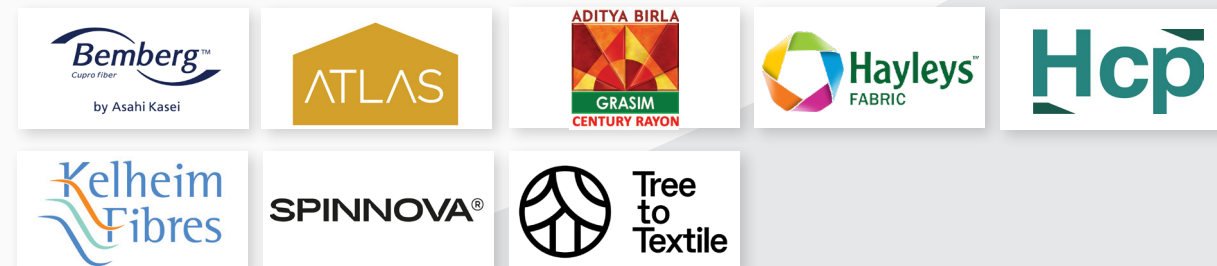


## Value Chain Affiliates

### Chemical Industry



### Textile Industry



## Associates



# Key Highlights from 2021

| JANUARY  | FEBRUARY   |
|--|--|
| <ul style="list-style-type: none"> <li>ZDHC MMCF Guidelines Chinese translation</li> <li>ZDHC Wastewater Guidelines Addendum launch and implementation</li> <li>ZDHC Leather Wastewater Guidelines Addendum release</li> <li>ZDHC Academy Trainer global event</li> </ul>  | <ul style="list-style-type: none"> <li>ZDHC Wastewater and Sludge Sample Collection training launch</li> <li>Wastewater Treatment System Operator Minimum Qualifications release</li> </ul>  |
| MARCH  | APRIL  |
| <ul style="list-style-type: none"> <li>ZDHC Chemical Management System (CMS) Technical Industry Guide (TIG) release</li> <li>Integration of OAR Facility Identifier into the ZDHC Gateway</li> <li>ZDHC Gateway Profile Completion and Connection Functionality launch in Chinese</li> </ul>   | <ul style="list-style-type: none"> <li>End of transition period for adoption of the ZDHC MRSL V2.0</li> </ul>  |
| JUNE   | MAY  |
| <ul style="list-style-type: none"> <li>Impact Day event 2021 and Impact Report 2020 release</li> <li>Performance InCheck Report improved functionality in ZDHC Gateway</li> <li>Capacity building programme of UNIDO SwitchMed programme in Egypt launched in collaboration with the United Nations Development Organisation</li> <li>Implementation pilot of SwitchMed programme in Tunisia in collaboration with the United Nations Development Organisation</li> <li>ZDHC Academy, in collaboration with Transformers Foundation ED, organised a regional student event in Brazil</li> <li>Implementation of the Supplier to Zero Programme in China</li> <li>ZDHC MRSL Principles and Procedures V2.0 release</li> </ul> | <ul style="list-style-type: none"> <li>ZDHC MRSL Principle and Procedures V2.0 release to ZDHC Contributors</li> <li>Ethiopia Public Private Partnership (PPP) - Suppliers trained on ZDHC CMS and reached Supplier to Zero 'Foundational Level' (Phase 1)</li> <li>ZDHC CMS Technical Industry Guide training launch</li> </ul> |
| JULY   | SEPTEMBER  |
| <ul style="list-style-type: none"> <li>ChemCheck Summary Report feature release</li> <li>Supplier to Zero pilot launch for 'Progressive Level'</li> </ul>  | <ul style="list-style-type: none"> <li>Update the internal submission and review platform for the ZDHC MRSL Technical Team and MRSL Council</li> <li>Collaboration with Solidaridad officiated</li> <li>ZDHC Customer Support Team centralised</li> </ul>  |

# Key Highlights from 2021

## OCTOBER

- ZDHC CMS TIG Denim and Leather training plug-in kick-off
- First Japanese Approved Training Provider on board
- New functionality released for the ZDHC Gateway Data Hub
- Start of engagement with the Dutch Textile Agreement

## NOVEMBER

- Implementation project with IDH in Vietnam and Ethiopia kick-off
- Resource Efficiency Module, MMCF Module and ETP evaluation Module release on Supplier Platform
- Southern Europe Regional Conference 2021
- Release ZDHC MRSL Submission Review Platform

## DECEMBER

- ZDHC seventh Annual Contributor Meeting
- East Asia Regional Conference 2021



# Roadmap to Zero Programme: Our Progress in 2021

The ZDHC Roadmap to Zero Programme has a clear mission: enabling the fashion industry to eliminate harmful chemicals from its global supply chain. Simply put: the programme detoxes fashion within an industry to decrease its global wastewater and carbon emissions. Chemicals are fundamental to all manufacturing processes and our work is the foundation for creating a more sustainable fashion industry - one that protects workers and consumers, fights climate change, supports biodiversity and helps preserve the oceans and drinking water across our planet.

The Roadmap to Zero Programme approaches sustainable chemical management holistically within the textile, apparel, and footwear value chain focusing on determining 'Safer Chemical Inputs', implementing 'Smarter Processes' and enabling 'Better Outputs' in manufacturing fashion and textiles.

## Safer Chemical Inputs



Controlling chemical inputs by applying the ZDHC Manufacturing Restricted Substances List (ZDHC MRSL) to the manufacturing process remains the cornerstone of the ZDHC Roadmap to Zero Programme. We contribute to controlling and reducing the use of harmful chemicals within the supply chain by developing guidance and maintaining tools that guide suppliers towards use of safer chemistries. Activities related to input chemistry include:

- Regularly updating the ZDHC MRSL to identify harmful chemicals that should not be used in manufacturing;
- Highlighting those chemicals that need suitable, safer alternatives by listing them on the ZDHC MRSL Candidate List;
- Promoting the principles of Green Chemistry to the industry to replace harmful

## Smarter Processes



Safer chemicals make a big difference but they must be combined with good processes for chemical handling to reduce the impact of chemicals on outputs such as air and wastewater. Proper processes must be in place to ensure that even as safer chemicals are used, they are used in the right way. With these procedures and best practices in place, workers are better protected, outputs are cleaner, and the potential impact on health of people and the planet is reduced. To ensure good business practices are in place, governing how chemicals are used and aligning practices activities.

The Process Focus Area develops guidance and tools on business processes and policies that can be used in the supply chain for sustainable chemical management. This includes the ZDHC Chemical Management System (ZDHC CMS), which guides and aligns the approaches of brands and their suppliers on sustainable chemical management. The ZDHC CMS includes two parts; the first is the ZDHC CMS Framework which lays out the minimum components of a CMS, and the second is the ZDHC CMS Technical Industry Guide (ZDHC CMS TIG) which



## Better Outputs

Assessing our impact and progress towards creating a world where water and air are safer for people and the planet, requires us to collect data on the manufacturing system outputs. Our focus area on Better Outputs has resulted in guidelines and toolsets to accomplish this. The primary guidelines created thus far are the ZDHC Wastewater Guidelines for textile, leather and footwear industry supply chains and the ZDHC Man-Made Cellulosic Fibres (MMCF) wastewater, air emission, and chemical recovery requirements for this fibre sector. These documents were developed to set a single, globally unified expectation across supply networks.

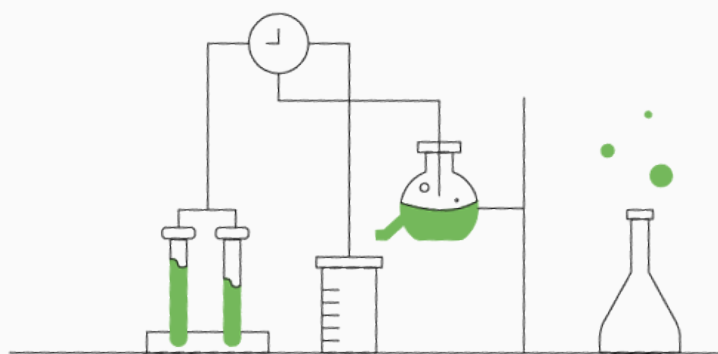
## Roadmap to Zero 2021 Activities

During 2021, the Roadmap to Zero Programme continued work to develop and improve sustainable chemical management guidance across all areas; safer Inputs, smarter Processes, and Better Outputs. This includes the following major activities:

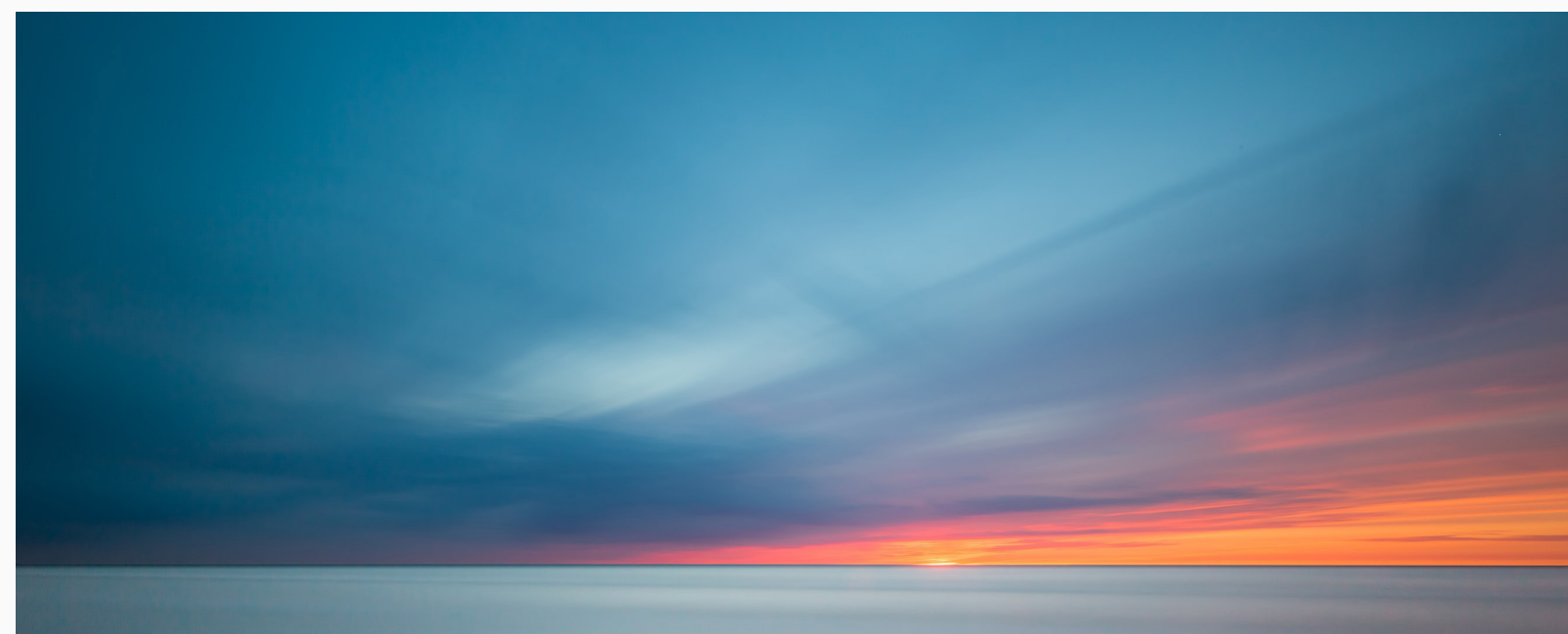
- Completed the implementation of ZDHC MRSL V1.1 and ZDHC MRSL V2.0 on the Gateway in April.
- Reviewing chemical substances following the procedure described in the ZDHC MRSL Principles and Procedures. Of the 10 that were submitted as suggested changes, 8 were included in the following MRSL update. The ZDHC Technical Task Team and the ZDHC MRSL Advisory Council conducted these reviews following the procedure described in the MRSL Principles and Procedures.
- Held stakeholder meetings and established a task team that evaluated approaches to evaluating suppliers of Commodity Chemicals so that they can be added to the Gateway - Chemical Module. (Commodity chemicals are those used in high volume and typically not supplied under a tradename).
- Working to develop science-based guidance to help brands and suppliers in the fashion industry go beyond the ZDHC MRSL and identify chemical formulations with the best sustainability profile so they can make informed choices. This guidance is being developed as the Formulation to Zero journey for chemical formulations. The journey is structured so that it may be included as an element in the chemical supplier leader programme.
- Release of the ZDHC CMS Technical Industry Guide (February)
- The ZDHC CMS Technical Industry Guide (TIG) provides detailed technical information to support implementation of the ZDHC CMS Framework in a manufacturing facility.
- Training, the ZDHC Academy developed and launched a ZDHC CMS TIG training, which is provided by ZDHC Approved Training Providers. The training format allows for online, hybrid or in-person training and connects ZDHC guidelines, platforms and solutions to the ZDHC CMS TIG.
- Collaborative approaches, ZDHC engaged in a SAC task team to support the Factory Environmental Module (FEM) to build a stronger connection to the ZDHC CMS TIG. Historically, the FEM chemical module was built from the former ZDHC CMS Manual. Apparel Alliance members, SAC and ZDHC have agreed that Supplier to Zero will support

## Roadmap to Zero 2021 Activities (continued)

- The ZDHC CMS TIG used Supplier to Zero as the roll-out solution for the ZDHC CMS Technical Industry Guide. ZDHC intensified the roll-out of the Supplier to Zero Programme for awareness-raising and capacity building of the global supply chain companies. Supplier to Zero was an integral part of every ZDHC event, briefings and training of Solution Providers like the Approved Training Providers and also as a standalone training in collaborative action or individual brand training. All Suppliers using the ZDHC Gateway can access the Supplier to Zero as a single-sign-on and use the self-evaluation against the ZDHC CMS TIG, the templates, case studies and further guidance material for free. They can get a certificate for acknowledgement of completion, which reflects their awareness of the CMS TIG and their ability to implement the Roadmap to Zero Programme in general.
- The ZDHC Wastewater Council (WWC) was established and conducted on-boarding for new council members. The council was created to guide the updates to the ZDHC Wastewater Guidelines and ensure the parameters and limits included are relevant, stringent, and pragmatic. The Wastewater Council comprises a diverse group of independent wastewater experts from the textile industry, academia, and water treatment industry to provide credibility and objectiveness to final decisions made. The WWC met regularly in 2021 to update the Wastewater Guidelines from Wastewater Guidelines Version 1.1 to Version 2.0 (released in March 2022). The process involved a detailed review of all existing parameters and limits, plus a review of processes.



- The Air Emissions Position Paper was released to promote the management of air emissions and share best practices with the aim to minimise air pollution across the textile, apparel, leather and footwear value chain. (January)
- Leather Wastewater Guidelines Addendum was released. These Guidelines were created to expand the wastewater scope to include the leather industry, and are an addition to the ZDHC Wastewater Guidelines Version 1.1. (January) The Wastewater System Operator Minimum Qualifications Guidelines were published. Recognising that proper wastewater treatment is critical to achieving better outputs, these guidelines will help standardise the minimum qualifications for education, training and experience required of operators and technicians operating wastewater treatment systems at all manufacturing facilities and other facilities operating effluent treatment plants (ETP). The guidelines help facilities to identify skill gaps and prepare for focused training solutions. (February)
- The ZDHC Foundation joined The Microfibre Consortium (TMC) as a Research Member to address the engagement needs of the industry to grow understanding of microfibres released in wastewater from production facilities and textile finishing facilities. (June)





# Roadmap to Zero 2022 Planned Activities

The Roadmap to Zero Programme will continue to develop and improve the guidance across all areas; Safer Inputs, Smarter Processes, and Better Outputs. This includes the following major planned activities

- Additional review of chemicals submitted to the MRSL Submission Platform by the ZDHC Technical Task Team and the ZDHC MRSL Advisory Council.
- Releasing ZDHC MRSL Version 3.0 and an updated ZDHC MRSL Conformance Guidance.
- Development of the Formulations to Zero Progressive Level which moves beyond MRSL conformance to ensure formulations will be fit-for-purpose with regard to RSL performance on materials.
- Continuing development of the the ZDHC Chemical Hazard Scoring Methodology Requirements as part of the Formulation to Zero 'Aspirational Level' development.
- Using case studies from brands, facilities, and chemical suppliers to support development of the Formulation to Zero 'Aspirational Level' elements related to water use, energy use, exposure potential, recyclability / circularity and waste / efficiency.



- Development work on a strategy for commodity chemicals management.
- Rolling out Supplier to Zero 'Progressive Level', after an intense piloting phase in 2021. It will allow for desktop review and feedback on a supplier's CMS implementation and allows for concrete feedback on continuous improvement.
- The Implementation HUB will coordinate activities related to the joint approach of SAC and ZDHC on CMS implementation and continuous improvement under the umbrella of the apparel alliance.
- Releasing ZDHC Wastewater Guidelines Version 2.0 which includes amongst others:
  - » Combining textile and leather wastewater guidelines into one;
  - » Streamlined approach to sampling and testing for Direct, Indirect and Zero Liquid Discharge;
  - » Incorporation of ZDHC MRSL Version 2.0;
  - » Guidance on appropriate sludge disposal pathways; and
  - » An update on sludge testing parameters.
  - » Planning a series of informational webinars for Brands, Suppliers, Labs & Certifiers to describe the implementation approach for the ZDHC Wastewater Guidelines Version 2.0.
- Work to develop Air Emission Guidelines V1.0 based on the Air Emissions White Paper.
- Creating a holistic strategy for natural and synthetic fibres
- Further development on requirements that builds on the current Man-Made Cellulosic Fibres Guidelines Version 1.0.





# ZDHC Gateway Highlights

## Overview Numbers

Throughout 2021, the ZDHC Gateway grew significantly.



32%

increase in the number of Chemical Formulators on the platform, totalling to 1,894 Chemical Formulators by the end of 2021.

42%

increase in the number of Suppliers on the platform, totalling to 6,651 Suppliers over the course of 2021.

58%

increase in registered chemical products on the platform.

28%

increase in the number of published wastewater test reports.

126%

increase in Supplier generated Performance Incheck Reports within one year.

# Chemical Module Achievements in 2021

## ZDHC Performance InCheck Report Design Changes

The ZDHC Performance InCheck reports are generated by Suppliers via third-party data sharing partners. In 2021 we made structural changes to the Performance InCheck Report to enhance how the report showcases the adoption of the current ZDHC MRSL V2.0 and the previous ZDHC MRSL V1.1 across the Suppliers Chemical Inventory. Chemical inventory can now be collected either based on the usage of chemical products or based on the delivery of chemical products.

## ChemCheck Summary Report

ZDHC introduced the ChemCheck Summary Report to enable Chemical Formulators to share an overview of selected ZDHC MRSL conformant published products with their customers (suppliers or brands). Formulators can now create customer-specific product portfolios and stage ZDHC MRSL conformance with their customer or potential customers who are not engaged with the Gateway.



## 2022 Planned Activities

### ZDHC InCheck Guidelines - Implementation

The ZDHC InCheck solution helps a Supplier to establish transparency in its efforts to better manage its chemical inventory towards sustainable chemistry. After the release of the Performance InCheck (Self Assessment of the Chemical Inventory) we will be working on the Verified InCheck - Level 1 and Level 2. The Verified InCheck Level 1 includes an on-site spot check by an accepted 2nd or 3rd party verifier. The Verified InCheck Level 2 includes a site audit by an accepted verifier.

This addition will demonstrate the credible implementation of the ZDHC MRSL conformant chemical products.

### Structural updates on Formulator profiles and the process to upload chemical products onto the ZDHC Gateway

A new upload process will allow Chemical Formulators to connect their uploaded chemical products to multiple production or distribution sites to indicate the regional availability of a chemical product. This will make it easier for supplier facilities to find chemical products on the Gateway, thereby increasing the ZDHC MRSL Conformance of the chemical inventory captured in their Performance InCheck reports.

### Enhancing Brand APIs to automate Performance InCheck data export

ZDHC InCheck helps Brands monitor their suppliers efforts in chemical management. Currently there are more than 13,000 Performance InCheck reports available for Brands to download on the Gateway. To enable Brands to directly pull their connected suppliers overall chemical inventory performance in their internal reporting tools we are working on enhancing the existing APIs.

## Wastewater Module Achievements in 2021

### Integration of ZDHC Leather Wastewater Guidelines Addendum

ZDHC Gateway facilitates the implementation of the Leather Wastewater Guidelines Addendum: to do this the ZDHC Gateway platform was updated to incorporate the leather specific parameters and limit values and assess leather suppliers wastewater performance data against the ZDHC Leather Wastewater Guidelines Addendum.

### Rollout APIs for Brands - Supplier Profile and ClearStream Performance

We have rolled out the Wastewater APIs for our Gateway Brand community. Through these APIs, brands can now directly pull wastewater summary reports along with supplier profile information, test report details, parameter lists and limits into their internal brand reporting tool.

## 2022 Planned Activities

### Updates on the Gateway to reflect Wastewater Guidelines V2.0 release

Whilst introducing the expansion of scope on the Output Focus Area and the release of the Wastewater Guidelines V2.0, ZDHC is working to updating the ZDHC Gateway - WastewaterModule. The changes will reflect updated reporting parameters and limit values, the Electronic Data Reporting (EDR) System Guidelines and revamped ClearStream report.



# ZDHC Gateway Joint Modules

## Achievements 2021

### Open Apparel Registry (OAR) Integration on the Gateway

The ZDHC Gateway introduced new functionalities in the Supplier Profile, which enables Suppliers to link their Open Apparel Registry (OAR) Supplier Profile Identification number directly to the ZDHC Gateway. Suppliers can now directly search for (or create) their OAR facility profile on the Gateway and link it. The integration of the OAR Identification numbers on the ZDHC Gateway provides a unique facility identity shared across multiple industry platforms. This enables accurate context to metrics developed through the ZDHC Roadmap to Zero Programme when integrated with data from other sources.

### Enhancements on the Connection feature on the Gateway

The Connection Tab on the ZDHC Gateway is a feature that facilitates brands to connect and monitor their entire supply chain. We have enhanced the feature to enable brands to export a glance of their supply chains engagement in the ZDHC Roadmap to Zero Programme and to easily flag implementation gaps. Brands can now export their list of connected suppliers and see the individual efforts with respect to the availability of Performance InCheck and ClearStream Data or the participation in the Supplier to Zero Programme.

### Launch of The Data Hub on the Gateway

We have launched The Data HUB feature on the Gateway to build a central place on the Gateway for suppliers and brands to organise, filter, view, and download suppliers' performance data. Brands are now able to easily filter and export supply chain specific data sets of Performance InCheck report, ClearStream report, and Supplier to Zero certifications in one go.

## 2022 Planned Activities

### ZDHC Gateway platform Performance and User Experience Improvements

To ensure the Gateway application is scalable from a functional and technical perspective, we will review the overall Gateway application with respect to the infrastructure, response time and general user journey. We will identify areas of improvement within the remit of security, performance, architecture and maintainability to ensure our growing user community experience.

### Enhancements of the API (Application Programming Interface) between the ZDHC Gateway and the Open Apparel Registry

During March 2022, Open Apparel Registry (OAR) added further fields to facility profiles, for example: Product Type, Processing Capability. The ZDHC Gateway has already utilised some of these fields, which will be automated through further enhancement to the API (Application Programming Interface) between the Gateway and the OAR. The bi-directional sharing of this data will strengthen facility profiles and reduce duplication and data entry. In the next iteration, we also plan to 'Live link' between OAR and Gateway platforms to maintain data integrity.

### The ZDHC Gateway Buyers' Guide for Brands

We will be working on the ZDHC Buyer's Guide to help fashion and textile brands make smarter decisions on their supply chain partners. Our goal is to highlight helpful, data-driven information about suppliers registered on the ZDHC Gateway that allows them to pick out

# Regional Highlights

## East Asia Region Update

### Achievements in 2021

- Adoption and industry convergence around ZDHC guidelines, platforms and solutions. ZDHC MRSL was adopted by the China leather industry-standard “QB/T 5573-2021 Specification for green-design product assessment-leather”.
- DMFa phase out pilot project gets key milestone in 2021. ZDHC and CPASL (China Artificial & Synthetic Leather Committee of China Plastics Processing Industry Association) continue working together to drive industry to be more sustainable by piloting on phasing out DMFa. There are two main technologies for creating PU without DMFa, one is water-based technology, the other is solvent-free technology. Compared to 2015, in 2021 in China use of the water-based PU technology is estimated to have increased nearly twelvefold, whereas solvent-free PU technology is estimated to have increased by sevenfold. This allowed some of our ZDHC Contributor Brands to successfully phased out 100% DMFa after this pilot project. Most importantly, more and more people believe DMFa-free technology and products will be the future trend.
- Important ZDHC events in 2021:
  - » 06 January - Webinar on ZDHC MMCF Guidelines introduction.
  - » 09 March - Webinar on ZDHC Gateway new function-Supplier Profile.
  - » 11 March - Webinar on ZDHC Gateway new function-Connection.
  - » 23 March - ZDHC InConnect to support the supply chain to implement the ZDHC Roadmap to Zero Programme.
  - » 30 March - ZDHC InConnect-Leather Specific to support the leather industry to implement ZDHC Roadmap to Zero Programme.
  - » 28 April - In person Exchange meeting among Chinese synthetic leather manufacturers.
  - » 11 May & 14 May - ZDHC InConnect - ZDHC Implementation for PUMA's Supply Chain (English section and Chinese section).
  - » 13 May - ZDHC InConnect - ZDHC Implementation for Target's Supply Chain



- » 25 May - ZDHC InConnect - ZDHC Roadmap to Zero Programme Implementation for Tchibo's Supply Chain.
- » 26 May - ZDHC InConnect - ZDHC Roadmap to Zero Programme Implementation for Next's Supply Chain.
- » 09 June - Webinar on ZDHC Gateway -Suppliers.
- » 10 June - Webinar on ZDHC MRSL and Gateway Chemical Module for chemicals
- » 23 June - Webinar on ZDHC Supplier to Zero Programme.
- » 24 June - ZDHC Impact Day 2021 “Colour of Fashion” for East Asia regional segment.
- » 29 June & 06 July - ZDHC InConnect - ZDHC Roadmap to Zero Programme Implementation for Benetton's Supply Chain.
- » 30 September - ZDHC InConnect: ZDHC Roadmap to Zero Programme & ZDHC Roadmap to Zero Programme Implementation.
- » 09-11 October - Intertextile Exhibition(China International Trade Fair for Apparel Fabrics and Accessories.
- » 09 December - ZDHC's 7th Annual Meeting (Virtual) East Asia Session.
- » 16 December - Virtual event of ZDHC East Asia Regional Conference 2021.
- A successful pilot of the Supplier to Zero leader programme in East Asia. 2021 is the year we officially launched the Supplier to Zero 'Progressive Level'. We conducted the pilot in countries such as China, Vietnam and Cambodia. More than 10 key suppliers from various industries including textile, leather, PU, accessories joined and successfully received the certificate for 'Progressive Level'.



## South Asia Region Update

### Achievements in 2021



- Events conducted in the region:

During the year, due to the pandemic prevailing for most part of the year, virtual events and webinars were conducted by the South Asia region to engage with stakeholders and create awareness on ZDHC deliverables. Only in October and December 2021, we were able to conduct in-person workshops and the regional part of the ZDHC Annual Meeting 2021.

- Some of the important events that were conducted are:
  - » 21 January - Webinar for leather industry in the South Asia region on Leather Wastewater Guidelines and ZDHC MRSL V2.0.
  - » 17 February - Virtual Event for leather industry on CMS TIG and Supplier to Zero
  - » 24 March - Virtual Event for Manufacturers on 'understanding and implementing the ZDHC CMS TIG'.
  - » 07 May - round table meeting with chemical companies from South Asia region, jointly with Chemical Supplier Advisory Group Management Team members
  - » 11 June - webinar on ZDHC Programme with sales teams of chemical formulators.
  - » 24 June - Impact Day for South Asia regional segment.
  - » 03 July - Virtual event for suppliers of Benetton Group in South Asia and Southern Europe region, jointly with Benetton team on ZDHC MRSL, Gateway and Supplier to Zero.
  - » 11 August - webinar on 'Understanding and Implementing the ZDHC MRSL Level 3' for chemical formulators in the region.
  - » 09 September - Virtual Event for suppliers on 'CMS Implementation experiences and innovations in sustainable chemistry'.
  - » 20 & 21 October - In person workshops, jointly with TÜV Süd, for tanneries in South India on ZDHC MRSL, CMS TIG, Supplier to Zero and Leather Wastewater Guidelines. Over 150 tanneries in Ranipet and Ambur attended these awareness sessions.
  - » 22 October - Webinar for chemical formulators in the region on 'Product Stewardship requirements and implementation actions' with industry experts Dr Dileep Wakankar and Dr Pankaj Desai.
  - » 09 December - In-person event of ZDHC Annual Meeting 2021 at Mumbai for Contributors.

## Southern Europe Region Update

### Achievements in 2021

- Events conducted in the Region

During the year, due to the Covid situation prevailing for most part of the year, virtual events and webinars were conducted in the Southern European Region to engage with stakeholders and create awareness on ZDHC deliverables. Nevertheless we were able to conduct the Southern Europe Regional Conference in person in November 2021, at the headquarter of one of our contributors OTB. This has been the first regional Hybrid event with attendees joining in person, as well as virtual.

- Other main events in the region included:

- » 26 February - Speech at the CID (Italian Detox Consortium) Annual Assembly titled "Detox to 2030 – New Fashion Industry sustainability values".
- » April - Workshop on CMS TIG and Supplier to Zero organised with Centro Tessile Cotoniero e Abbigliamento.
- » 20 May - Gateway Workshop & CMS TIG and Supplier to Zero adoption for Leather.
- » 24 June - Impact Day for Southern Europe regional segment.
- » 3 July - Virtual event for suppliers of Benetton Group in South Asia and Southern Europe region, together with Benetton on ZDHC MRSL, Gateway and Supplier to Zero.
- » 07 October - A virtual event for Suppliers focused on Supplier Platform has been organised by ZDHC and promoted by Contributors Luxury Brands for suppliers located in Italy.
- » 28 October - Participation to a panel discussion during UL's Luxury Brands and Fashion Retailers Virtual Summit.
- » 03 November - Annual Southern European Regional Conference.
- » 02 December - Participation to a panel discussion during the Process Factory. Annual Event "Prime numbers the sustainable renaissance of fashion".
- » 09 December - ZDHC 7th Annual Meeting (Virtual) Southern Europe Session.

- Special Projects

- » CID RSL for Recycled

The ambition to recycle as much fibres as possible may sometimes apparently conflict with the aim to prevent adverse environmental and human health impacts, due to the chemical characteristics of the recycled garment which may not meet the actual



expectations in terms of chemical quality. That is why the Southern Europe regional director, in the framework of and MOU signed with CID (Italian Detox Consortium) has supported the coordination of a national working group, to define common expectations on chemical quality of products made using recycled materials. The RSL for products made using recycled nature fibres has been made available at the following link: <https://www.consorziidetox.it/index.php/documents/?lang=en>.

The working group, which was participated by all main Italian manufacturing clusters working with natural fibres, will remain active with the scope to improve the documentation when new data will be available and work to have this document become a reference expectation for the industry.

- » Pilot Project on Verified InCheck Solution

In May, we conducted a pilot project on the Verified InCheck Solution, supported by the Contributor and Service Provider Process Factory. Data and comments collected during the pilot will be helpful for the next steps in the work that the Programme Team is carrying on related to the InCheck documents and solutions.

- » Supplier to Zero successful roll-out in Southern Europe

In 2021, we officially launched the 'Progressive Level' of Supplier to Zero. The region has contributed to the Supplier to Zero 'Progressive Level' pilot project in Southern European countries, focusing mainly on the Italian market. Around ten key suppliers coming mainly from the textile industry joined the pilot, and we were also pleased to extend the participation to one company in Egypt.



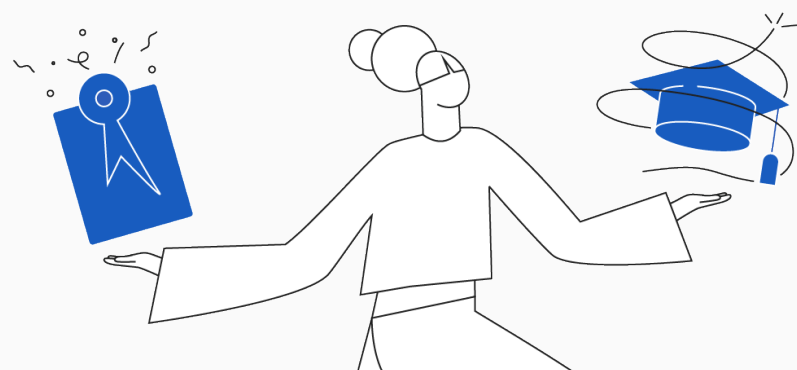
# Partnerships and Collaborations

In 2021, ZDHC built additional partnerships and collaborations with organisations and institutions. Further developments and progress were made to enhance existing partnerships and collaborations. Some of the highlights are given below:

## French Development Agency (AFD)

AFD & ZDHC are exploring the possibility of a joint project with a public or private financial institutions to create a financing vehicle to support the production facilities for implementing ZDHC Roadmap to Zero Programme as one of the loan criteria dedicated to the reduction of chemical footprint and water pollution prevention in emerging and developing countries. By the end of 2021, ZDHC and AFD have signed a document to conduct market research and feasibility study in five Asian countries, namely India, Bangladesh, Thailand, Cambodia, and Vietnam. This study aims to evaluate the size of the market and level of pollution in these five countries and their interest in participation, which will help to judge the approximate amount of credits and grants required. At the same time, AFD is conducting another feasibility study to evaluate the financial aspects and financial infrastructure (banking sector and their willingness) on adopting the credit vehicle to financially support the TAL (Textile, Apparel and Leather) industry in these countries. Following the feasibility study, a criteria matrix will be developed to prioritise one or two countries to start the project for setting up the financial mechanism via national and local bank partners.

This collaboration is quite interesting and has the potential to scale up the uptake of ZDHC Guidelines and Solutions as a measure for water stewardship and pollution prevention from the manufacturing TAL industry.



## Valuing Water Initiative (VWI)

The Valuing Water Initiative VWI is a programme funded by the Dutch Government, seeking to bring systemic change in the way water is valued in policy, practice, finance and behaviour by practical application of the Valuing Water. VWI Principles are developed under the United Nations & World Bank High Level Panel on Water.

In the context of the development of showcase analysis, VWI has analysed the ZDHC roadmap to Zero programme as one of the most important water tackling challenges in the textile industry. In this context, ZDHC is selected by the VWI committee as one of the 14 showcase cases in the Private sector initiatives to address a water related risk to the fashion industry.

## WRAP (Waste & Resources Action Programme) UK – Textile 2030

WRAP UK has launched a textile sector programme, Textile 2030™-A vision for the UK. Textile 2030 is a world leading voluntary initiative that will transform the UK fashion and textile sector from a “Take, Make and Dispose” model to a more circular model over the next decade.

With the collaboration and partnership, WRAP has requested ZDHC to support the Textile 2030 Programme in helping their signatory companies in implementing ZDHC guidelines and solutions on sustainable chemical management and using the Resource Efficiency Module in the Supplier Platform. In this context, ZDHC will become an associate signatory member to support WRAP Textile 2030 Program and UK based brands and retailers committed to Textile 2030 goals.

## WWF

In 2021, ZDHC and WWF outlined the areas of cooperation under a collaboration agreement on ZDHC Roadmap to Zero Programme within WWF’s Water Stewardship. The WWF’s textile, leather and chemical industry projects will occur initially in five countries (India, Pakistan, Vietnam, Turkey, and China). The agreed actions are expected to raise the manufacturing and environmental standards of these industries with respect to national and internationally environmental levels and help in growing cleaner production activities in the textile and leather factories and thus furthering the purpose and objectives of WWF Water Stewardship projects in these countries.

A work plan and KPIs are in process of finalisation to transform the goals defined in the collaboration agreement between ZDHC and WWF into operational steps to evaluate the progress of the objectives on an annual basis and track the overall success of the collaboration.

## Solidaridad

ZDHC and Solideridad have entered into a collaboration agreement to advance toward environmental improvements in the textile, footwear and leather value chain. Each of the Solidaridad country offices and ZDHC regional offices will work independently on specific projects in specific countries under the umbrella of global collaboration.

The parties collectively have the intention to support the implementation of cleaner production in textile, apparel, footwear and leather production, amongst others, through increasing the uptake of the best practices around the ZDHC MRSL & conformity guidance, chemical management framework and wastewater quality management.

## amfori

As a continuation, amfori BEPI and the ZDHC are collaborating on the implementation of relevant ZDHC tools and standards in the wider context of strengthening chemical and/or environmental management systems within textile and footwear supply chains globally. This collaboration aims to improve the chemical and environmental performance of amfori BEPI and ZDHC facilities by supporting various environmental performance indicators linked to chemical management. ZDHC will support amfori BEPI's facilities through the ZDHC Supplier to Zero Programme and other ZDHC solutions and guidelines in establishing sound chemical and environmental management systems. The overall project facilitates joint implementation of solutions and standards and increases collaboration on capacity building activities and impact measurement.

amfori BEPI has adopted the ZDHC Supplier to Zero Programme by using the Supplier Platform. This will ease any further duplication and help the suppliers and BEPI members get information on the performance of the chemical management of their facilities.

## Responsible Business Coalition (RBC)

The Responsible Business Coalition (RBC) at Gabelli School of Business of Fordham University has established a Wisdom Council, which serves as a body of subject-matter experts providing guidance and counsel to industry CEOs and leaders in pioneering more responsible business. Two of the ZDHC Management Team members are invited and nominated by RBC to join as members of the Wisdom Council, which provide a unique opportunity to continue to shape a more sustainable future, influence the education of the next generation, and network with other members of the Council including global, cross-industry experts and NGOs, influencers, and government officials.

Requested from various CEOs, RBC is developing a general and global framework - the Impact Index - which will have some major criteria based on which impact of the product performance will be assessed and used to raise consumer awareness. Chemical usage/ ingredients are defined and selected as third important criteria among various major criteria such as animal welfare, reusable/ plastic-free packaging and material composition. ZDHC is invited as an expert organisation to support building the governance model of Impact Index and its operating plans.

## Fashion Conveners (FC)

Following sustainability initiatives are the partner organisations of Fashion Conveners: ZDHC, SAC (Sustainable Apparel Coalition), TE (Textile Exchange), All (Apparel Impact Institute), FFG (Fashion for Good), Global Climate Action- United Nation Climate Action, GFA (Global Fashion Agenda), FMC (Fashion Makes Change) and RBC (Responsible for Business Coalition, Fordham University)

ZDHC, being a key member organisation, is playing an important role in further strengthening the vision and action plan of the Fashion Conveners to align and participate in collective activities to reduce the duplication and bring more synergies to create a collective impact in the fashion industry.



## IDH

IDH and ZDHC are partnering together with a purpose to accelerate sustainability within the value chains within IDH strategy 2021-2025 (innovating Impact at scale through the development of impact coalitions of companies, NGOs, governments, trade unions, financial institutions, and universities).

Both IDH & ZDHC are engaging to support the creation of cleaner production of textile, apparel, footwear and leather products, through increasing the uptake of the best practices around the ZDHC MRSL, data management, data disclosure and capacity building for facilities in various industrial parks.

Within this context of collaboration, IDH and ZDHC are working jointly on a specific project named "Building sustainable chemical management capacities as best international practice in some selected industrial parks in Ethiopia and Vietnam" during a three year period (2021 - 2024).

## UNEP Textile Project in Asia on Chemicals of Concern

Under the UNEP GEF funding programme, UNEP has launched a 5-year project on significant and documented reductions in use, releases and exposure to chemicals of concern (CoCs), including POPs (Persistent Organic Pollutants) in the textiles sector in selected countries in Asia (Bangladesh, Indonesia, Pakistan, and Vietnam). ZDHC, among other stakeholders, is nominated and assigned as Lead partner by UNEP to support the execution of several activities in this project.

The project has two phases:

- Phase one is the design and preparation of the project which was conducted in 2021, and
- Phase two is the main execution of the project, which will be executed from 2022 to 2026.

## UNEP Textile Project in Asia on Chemicals of Concern

ZDHC was involved in the design phase of the project to conduct the market research for the baseline assessment in Bangladesh for textile processing and the chemical industry which will create a baseline for the main execution of the project for evaluating the reduction in the use of CoC for the next five years.

ZDHC involvement in this project will bring more new facilities to the implementation of ZDHC Roadmap to Zero programme and open up new dimensions, especially from the Stockholm conventions, their impact and circularity perspectives.

## UNIDO

The UNIDO project titled as "Promotion of the circular economy in the textile and garment sector through the sustainable management of chemicals and waste in Lesotho, Madagascar, South Africa and Ethiopia" is under the process of final funding approval from the UNEP GEF council. This project will have a 5 year duration starting from 2021- 2026. ZDHC is one of the partner organisations to support the project from a sustainable chemical management role in the circular economy in these African countries.

A work plan is being finalised between ZDHC and UNIDO to define the KPIs for the cooperation on this project. This project will open opportunities for ZDHC to support and implement ZDHC guidelines and solutions in this new geographical areas which will help various brands in improving the performance of their supply chain in this region of Lesotho, South Africa, Madagascar and Ethiopia.

## Policy HUB

Sustainable chemistry is one of the key elements of various existing policies (Green Deal & circularity) as well as of on-going discussion and upcoming policy regulations. ZDHC's engagement to policy consultation and policy advocacy was identified to be important, as the ZDHC community is bringing insight experiences and possible roadblocks in realistic and practical implementation of sustainable chemistry and sustainability in general to policy makers.

With this context, at the beginning of 2021, ZDHC joined the Policy Hub (PH) as a partner organisation. Together with ZDHC, there are four other organisations (SAC, FESI, GFA and TE) that form the steering committee of the Policy HUB. ZDHC's goal of joining Policy Hub has been to channelise ZDHC point of view and experience collectively with other PH partner organisations so that it brings a joint approach for bigger industry representation in policy advocacy to guide policy regulators.

## apparel alliance

The apparel alliance is a partnership between four organisations who have joined forces. It aligns its goals, solutions, tools and reporting, as well as events and training to create a connected, end-to-end path to action for the entire apparel and footwear industry as we work together to achieve a minimum goal of 45% reduction in GHG emissions by 2030.

Together, the four organisations created a contiguous sustainability framework for the entire industry, spanning across four primary resource areas: Programmes & Tools, Global Implementation, Impact Management & Funding, and Administration & Infrastructure. Please visit for more information [www.apparelalliance.org](http://www.apparelalliance.org).

## Highlights from the Implementation HUB



### ZDHC Academy

#### *General*

In 2021 the ZDHC Academy celebrated its five year anniversary. The platform, team, approval requirements and processes were formed in 2016, and the first training via the platform was launched in 2017. Even though the pandemic slowed things down in 2020, the Academy team realised that the Approved Training Providers were able to give training and serve the community by sharing experience and knowledge. In 2021 an essential shift took place in which a strong training uptake can be seen and we can start to measure our impact in the years ahead.

#### *Training offer and methods*

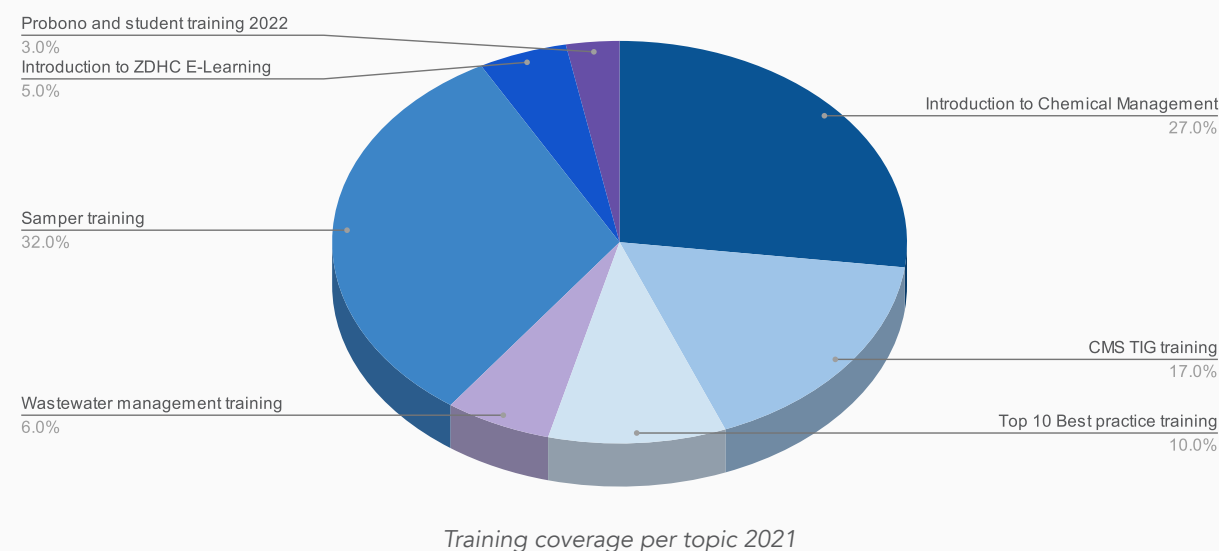
In the past five years, the ZDHC Academy extended its offer of training topics. Both in terms of training topics and the scope and scale of sessions.

In 2017, the ZDHC Academy offered the Introduction to Chemical Management Training and launched the Top 10 Issues & Best Practises Training later in the year. The training courses were offered by 5 ZDHC Approved Training Providers in several different languages. All trainings were provided in person.

In subsequent years, the ZDHC Academy developed five additional courses. Ranging from Wastewater Management Training to a Wastewater & Sludge Sample Collection Training dedicated to the sampler community of ZDHC Accepted Laboratories.

Due to the ongoing pandemic, we acknowledged the continuous need for online training, both self-paced as guided by trainers. Therefore, in 2021 we offered in-person training when possible, collaborated to set up self-paced e-learning courses and offered guided online training world wide.

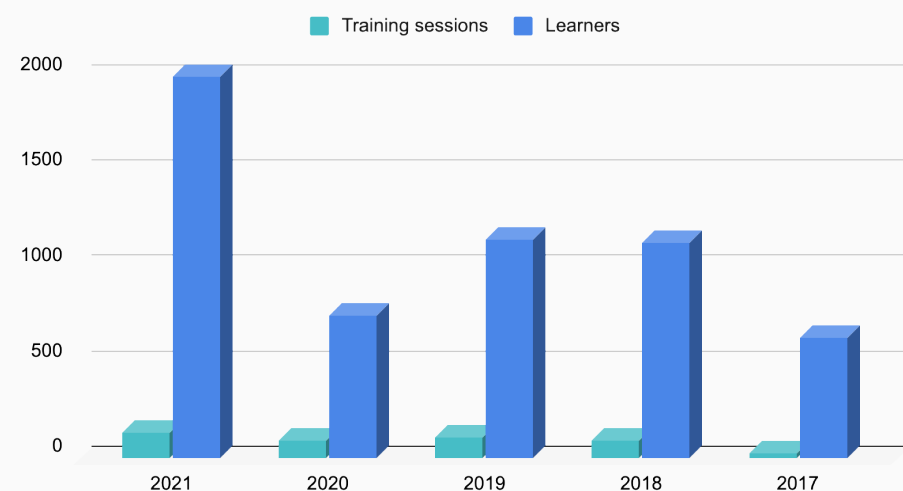




## Achievements

Since 2017, we have been able to sustain growth, although the pandemic affected the uptake of training in 2020. Underneath we share an overview of the training courses given in the past

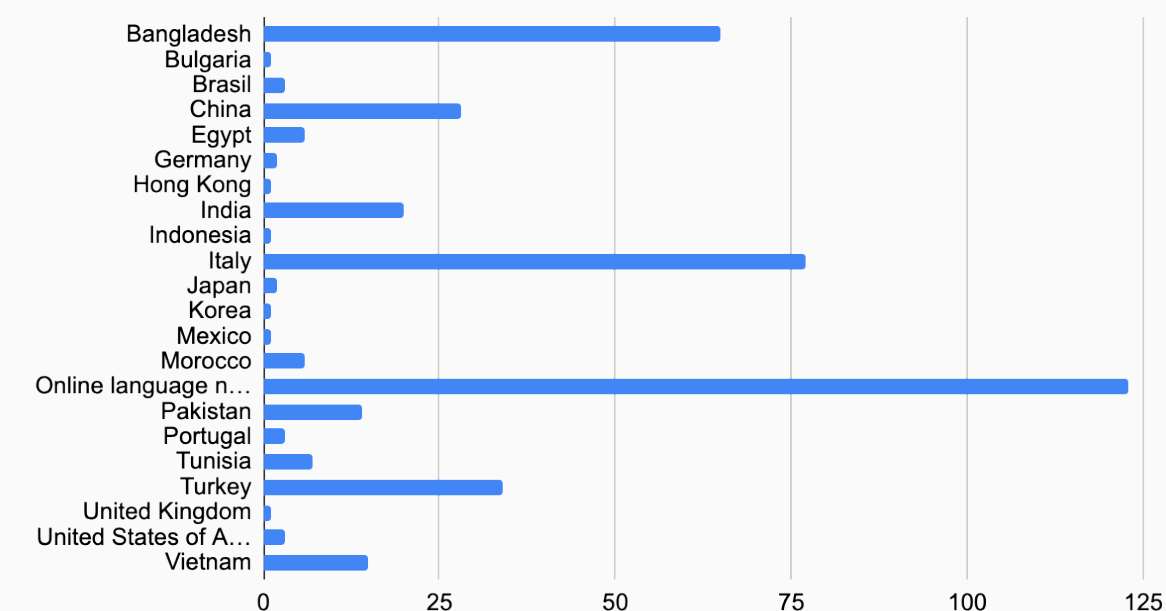
Training sessions, Learners and Average per class



5 year development training uptake ZDHC Academy

As the ZDHC Academy increased its offer, an analysis of which courses and countries are most popular is important to determine future offers as well as to reflect on potential curriculum changes. The ZDHC Academy will analyse the uptake on an annual basis to adjust the short and long term strategy and share this information with Approved Training Providers to plan their courses for the next year. The underneath numbers are reflecting 2018-2021.

Training courses 2018-2021 per country



Training courses 2018-2021 per country

In addition, to the above mentioned achievements, together with our Approved Training Providers and Programme Team, we have launched the following training courses:

- ZDHC CMS TIG Training
- ZDHC Wastewater & Sludge sample collection Training (Accepted Labs only)
- Introduction to ZDHC E-Learning (Contributors and Friends of ZDHC only)

# Student Programmes in Italy

In 2021, the ZDHC Academy prolonged the collaboration with student programmes in Italy.

The programmes aim to educate young professionals about sustainable chemical management to strengthen their skills and improve their job opportunities in the industry. Together with our Approved Training Providers and ITS Cosmo Fashion Academy we started a fruitful collaboration that will be pursued in 2022.

# Brands Training

A key achievement of 2021 was the launch of extensive brand training roll out projects. Together with the ZDHC Academy, brands invited suppliers to receive ZDHC CMS TIG Training via Approved Training Providers to prepare themselves for implementing a Chemical Management System, which will support the suppliers with their work on the Supplier Platform and the ZDHC Gateway.

# ZDHC Annual Trainer Event & Trainers Masterclass

The number of ZDHC Approved Training Providers and Accredited Trainers has grown in recent years. To foster this growing community and ensure the trainers can stay up to date about developments, ZDHC hosted two different types of events in 2021. A ZDHC Annual Trainer Event and monthly Trainer Masterclass.

Our first ZDHC Annual Event focused on best practices of online and virtual training. While the monthly Trainer Masterclass aimed to inform the trainers about the latest ZDHC developments and consult the trainers on upcoming training module developments and feedback coming out of their training sessions.

To share just a few numbers of the trainer community:

|                             | 2021 | 2017 |
|-----------------------------|------|------|
| Approved Training Providers | 21   | 6    |
| Accredited Trainers         | 200  | 50   |
| Local Languages spoken      | 12   | 7    |

In 2021, we accredited three new training providers. Kaken and Boken in Japan and Nimkartek in India.

# 2022 Planned Activities

In 2022, the ZDHC Academy will aim to continue the momentum of what we achieved in 2021. The following key projects will be in our planning.

- Refurbishment of the ZDHC Academy Platform
- Strengthening self-paced e-Learning course offering
- Extending ZDHC CMS TIG Training to cover denim, footwear and leather industry
- Provide training and capacity building support to the key industry stakeholders as new ZDHC Guidelines will launch in 2022.
- ETP Operator Guidelines training development
- Scaling University collaborations to educate future industry employees.
- Extending the SWITCH MED project with UNIDO with a Phase 3.
- Developing educational collaborations to scale and develop ZDHC Academy training.



## Supplier Platform and Supplier to Zero: The Supplier

The Supplier Platform as established in 2020 is designed to accelerate the global impact of ZDHC based on solutions for suppliers. Suppliers cannot improve simply by measuring their impact. The industry needs implementation tools for change. The Supplier Platform empowers suppliers to continuously improve by providing those implementation tools.

The Supplier Platform enables suppliers to evaluate their knowledge and implementation status against industry best practices. The Platform is the entry point for Suppliers to take full ownership of ZDHC Roadmap to Zero Programme implementation activities.

Within the Supplier Platform, several modules help suppliers manage chemicals, water and energy. The various modules provide suppliers with self-learning, guidance documents, peer-learning and assessment tools. The Platform brings suppliers up to speed on implementing the industry's leading best practices related to chemical management and resource efficiency.

### ***ZDHC Supplier to Zero 'Foundational Level'***

Supplier to Zero is part of ZDHC Leaders to Zero, including a programme for each ZDHC key stakeholder group: brands, suppliers and chemical formulators. Leaders to Zero intends to streamline the industry's sustainable chemistry implementation efforts by converging individual approaches that are causing supply chain confusion and duplicative efforts.

Launched in June 2020, Supplier to Zero is ZDHC's Leader Programme designed to align and speed up the implementation of ZDHC guidelines and solutions into the value chain. Supplier to Zero is the entry point to building sustainable chemical management excellence and a leadership programme for suppliers to accelerate implementation practices:

- It empowers full ownership on the Roadmap to Zero journey and develops aspirational leaders in Brands and Suppliers.
- It continuously improves supply chain performance and benchmarks industry performance through tools, guidance and evaluation.
- It supports the implementation of the ZDHC Chemical Management System (CMS) Framework and guides the deployment of the ZDHC CMS Technical Industry Guide.

- It distributes certificates in sustainable chemical management and showcases sustainable chemical management excellence to potential suppliers.
- Advanced suppliers can demonstrate their performance and industry leadership at the 'Progressive' and 'Aspirational Level'.

Overall, Supplier to Zero helps ZDHC monitor the Roadmap to Zero performance on the ground, at the factory level, a vital expansion of ZDHC's reach and ability to affect long-term change.

### ***ZDHC Supplier to Zero 'Foundational Level' 2021 roll-out***

Although the Supplier to Zero was launched in 2020, the full rollout of the 'Foundational Level' started in 2021. We saw a significant increase in the number of facilities. The rollout of the 'Foundational Level' is pushed by a large adoption of Supplier to Zero by Contributor Brands. By adopting Supplier to Zero as the guidance and improvement solution on sustainable chemical management, Brands align and speed up the implementation of ZDHC guidelines and solutions into the value chain. Connectivity of the Supplier Platform and the ZDHC Gateway ensure that Brands can see the Supplier's status on Supplier to Zero, which helps build trust in the Supplier's ability to implement the ZDHC Chemical Management System (CMS).

### ***ZDHC Supplier to Zero 'Progressive Level'***

The 'Foundational Level' is based on the ZDHC Chemical Management System (CMS) Framework principles. By reaching the 'Progressive Level', suppliers demonstrate awareness and implementation of ZDHC sustainable chemical management.

In 2021, the 'Progressive Level' of Supplier to Zero was launched on the Supplier Platform. The 'Progressive Level' allows suppliers to demonstrate continuous improvement. It includes an independent performance review. Additional content is also provided, supporting suppliers' efforts by offering more profound insights on industry best practices and the optimal techniques available.

By completing the 'Progressive Level', suppliers can:

- Gain even more credibility with a reviewed assessment that includes InCheck and ClearStream (for wet processing units) assessment
- Get assessed on more topics and get more recommendations
- Obtain an extensive review report that can be shared with Brands
- Highlight your organisation as a future-focused industry leader

### ***ZDHC Supplier to Zero 'Progressive Level' pilot in the second half of 2021***

To support a successful launch, user experience, testing of review and platform functionality, a progressive pilot was launched in September 2021. The learnings and outcomes of the pilot project have been used for further shaping the 'Progressive Level' evaluation, user experience and the desktop review process.

The pilot also helped create a fundamental understanding of the business case for potentially outsourcing the desktop review or building respective internal capacities. The 'Progressive Level' was piloted in three waves (global, Chinese and EMEA) in the third quarter of 2021.

Supplier participants have been selected from the following groups: Suppliers of ZDHC Contributor Brands that already completed the 'Foundational Level' and Contributor Suppliers recognised for being knowledgeable and cooperative.

Progressive Pilot participants have provided invaluable information regarding the evaluation in the 'Progressive Level'. They have verified that the IT platform functionality and usability is at the desired level. They helped test the system's capabilities and functions intensively in the context of the desktop review (e.g., document upload & review, communication feature for reviewer & user). The pilot also showed how well the supplier's CMS set-up and performance can be evaluated in desktop review and if there are gaps.

The learnings of the Pilot will be used for further enhancement of the Supplier journey in Supplier to Zero, the development of further materials, and the development of the desktop review process.

### ***Implementation HUB - Resource Efficiency Module***

2021 also marked the development of the Resource Efficiency Module on the Supplier Platform. In general, improving resource efficiency supports the textile and footwear industry to reduce negative environmental impacts, such as greenhouse gas emissions and climate change, water scarcity and pollution. On the Resource Efficiency Module, Suppliers can analyse their environmental performance, identify improvement opportunities, and implement measures to conserve resources and increase efficiency. Suppliers can record resource consumption, monitor projects and savings to lead the way towards meeting ambitious, science-based reduction targets.

REM is a self-evaluation and self-learning platform solution. Suppliers can evaluate their environmental performance, identify improvement opportunities, and implement measures to conserve resources and increase efficiency using over 300 practical revised CPI2 and brand recommendations. Because it is being hosted on the Supplier Platform, REM links to the ZDHC Gateway and thereby reaches Tier 2 Suppliers and beyond with chemical and energy intensive processes, which are also the most relevant for reaching ambitious climate goals.

In addition, suppliers can record resource consumption, monitor projects and savings to lead the way towards meeting ambitious, science-based reduction targets. The target setting functionality and the ability to start saving projects offer unique opportunities to work towards goals set by brands and the Fashion Industry Charter for Climate Action and measure the impact of improvement activities. The development of the Resource Efficiency Module was also supported by the GIZ FABRIC Asia Programme in 2021.



# Implementation Projects Worldwide

## Ethiopia Public-Private Partnership Project

Funded by DOW and GIZ DeveloPPP, this project aims to improve the chemical management capabilities of the textile industry and expand the university education curriculum for textile engineering undergraduate students.

At the textile industry level, the focus has been given to local consultants and wet processes factories where our ZDHC Approved Training Providers have trained both parties. Factories also worked with their local consultants to improve their CMS, and all 13 participating factories have achieved the Supplier to Zero 'Foundational Level'.

At the university level, ZDHC has co-designed an undergraduate curriculum with the Bahir Dar University lecturers. Updated industry training was also provided to the lecturers to ensure they kept informed prior to delivering lectures to the undergraduate students.

This project runtime was extended from January 2022 to June 2022 to compensate for challenges in implementation during the COVID pandemic, civil unrest and conflicts in Ethiopia.

[\(Read more\)](#)

## Pakistan Train the Trainer Programme

During 2021, the Train the Trainer (ToT) Programme on Chemical Management in Pakistan under the GIZ regional initiative FABRIC was taking place. By August 2021, six training sessions were completed, and participants were equipped to move towards practical implementation at the factory level. A workshop focusing on the requirements of ZDHC was given by one of our Approved Training Providers. ZDHC Academy participated by joining the kick-off session and speaking to the participants about this collaborative initiative. The final sessions of the ToT Programme will be held in Spring 2022.

## UNIDO - North Africa

In 2021, the EU-funded SwitchMed Programme (MED TEST III) moved into its next phase. After finalising training sessions in Morocco, Tunisia, and Egypt six facilities are part of phase II, the pilot implementation phase. By the end of the pilots, in 2022, the participating companies will have developed roadmaps to implement sustainable chemical management, started working in the ZDHC Gateway and using ZDHC guidelines to develop their facilities further. 4 out of 6 companies in Morocco and Tunisia have finalised the pilot in 2021. More information about the results of the pilot will be available next year.

## UNIDO - Southern Africa

Next to the project in North Africa a new agreement has been signed to collaborate on the project "Promotion of circular economy in the textile and garment sector through the sustainable management of chemicals and waste in Lesotho, Madagascar and South Africa". The GEF funded project will focus on several different components, including but not limited to:

- Strengthening of regulatory and institutional capacities for adoption and promotion of Circular Economy in the textile and garment (TG) sector
- Recyclability of textile and garment wastes is enhanced through POPs-free textile manufacturing process and the implementation of BAT/BEP and RECP investments.
- Knowledge management to scale. Focussing on capacity building, sharing best practices and making the exchange of knowledge within the industry not only regionally but also globally available.

## Transformers Foundation collaboration

Transformers Foundation went fully virtual in 2021, which gave the ZDHC Academy several opportunities to collaborate in the Transformers Foundation ED Events and the Transformer Foundation 'The Truth' Series. As the events were remote, the ZDHC Academy presented to students and consumers in Brazil, Mexico, and Pakistan in three sessions. Our Programme Director Scott Echols participated in The Truth Series Episode 1 about industry words that are confusing or sometimes even misleading.

