



# Our Detox Report

2014-2019

# Editorial

## Management Summary

*In 2011, Greenpeace issued a wake-up call to the fashion industry with the launch of its Detox campaign. In 2014, Tchibo joined the movement and committed to phase out hazardous chemicals in textile production until 2020 by signing the Greenpeace Detox Commitment.*

Our 2020 roadmap commitment is coming to an end, so it's time to highlight what we have achieved together and outline our future strategy.

Over the past years, Tchibo worked on the key tasks arising from the commitment and made relevant progress. One of the main aims was to increase the transparency on upstream suppliers where dyeing and washing processes are carried out. Starting with a 0% transparency rate in 2014, Tchibo has achieved transparency on its wet processing factories for 96% of all textile products produced in 2019.

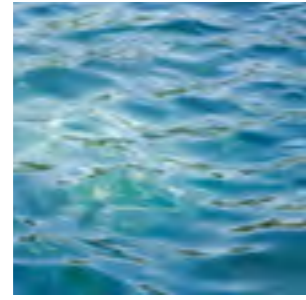
An important milestone is the paradigm shift throughout the value chain from output to input management of chemicals. By expanding the focus to control chemicals not only in the final product but already at input level in the factory, people and planet are protected among the entire textile value chain. Tchibo's wet processing factories are expected to only use chemicals that are compliant with its Manufacturing Restricted Substance List (MRSL). This is verified by waste water testing as well as chemical input monitoring at factory level. In 2019, 63% of all wet processing factories have submitted a valid waste water test. The data evaluation of the past four years shows that most chemical groups have been found less frequently.

Overall there has been a 21% decrease in detection rates of hazardous substances since 2016.

Tchibo believes that only collective action can transform the industry. Therefore we are highly engaged in multi-stakeholder initiatives like the "Zero Discharge Hazardous Chemicals" Initiative (ZDHC) or the German "Partnership for Sustainable Textiles" to promote the industry-wide implementation of the Detox standards. Over the years, Tchibo has developed many online and offline training solutions to support suppliers. By today, 61% of Tchibo textile products are produced in a Detox qualified wet processing factory.

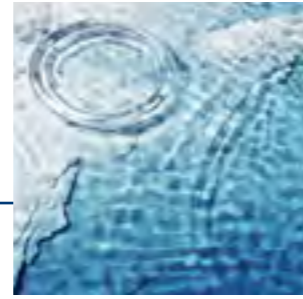
Further, Tchibo has put on top of the agenda by working towards elimination of hazardous chemicals from the supply chain. Since 2018, the scope has expanded to address water risks holistically. The Detox program was integrated in Tchibo's Water Stewardship strategy. Greenpeace has endorsed Tchibo for contributing to a "significant improvement" in transforming the fashion industry. However, we know that our work is far from done. As we reflect on what we have achieved over the past years, we are also looking at the road ahead, with a clear vision to continue and accelerate our journey and progress beyond 2020.

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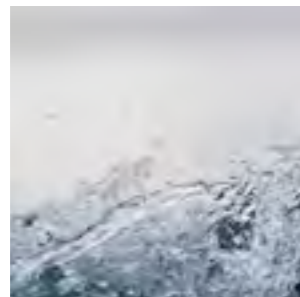


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# Reason Why –

What does  
Water mean  
for People  
and Planet?

**1** Only 1% of all water on earth is accessible freshwater (Source: WWF)

**2** Freshwater resources are becoming scarce. By 2025, half of the world's population will be living in *water-stressed areas* (Source: WHO)

**3** Safe drinking water and sanitation are recognized as basic human rights (Source: United Nations)

**4** Today 1, in 3 people around the world lack access to safe drinking water (Source: WHO/UNICEF)

**5** 20% of industrial water pollution comes from textile dyeing and finishing (Source: World Bank)

**6** The fashion industry consumes 79 billion cubic meters of water annually – enough to fill 32 million Olympic-size swimming pools (Source: Global Fashion Agenda)

**7** It takes 2.720 liters of water to make one cotton T-Shirt – that's how much we normally drink over a 3-year period (Source: Worldwatch Institute)

**8** 25% of chemicals produced worldwide are used for textiles! A review of 2,400 chemicals used in clothing manufacturing found that *approx. 30% posed a risk to human health* (Source: Swedish Chemicals Agency)

**9** Globally, 80% of wastewater is released to the environment without adequate treatment (Source: UNESCO)

**10** Good water quality is *essential to human health*, social and economic development, and the ecosystem. Therefore, water must be carefully managed (Source: United Nations)

# Our Detox Commitment

**In 2011**, Greenpeace launched its Detox campaign to address the use of hazardous chemicals in the manufacturing of textiles, which causes massive water pollution in all production countries.

In order to drive change, Greenpeace appealed to the responsibility of international textile brands and challenges the textile industry to eliminate hazardous chemicals across their entire supply chain by 2020.

This challenge was taken up by the fashion industry – including Tchibo. Sustainability has been an integral part of Tchibo's business strategy since 2006. We constantly aim to reduce the environmental impact of the production of our consumer goods. In 2014, Tchibo has publicly committed to eliminate hazardous chemicals from textile supply chains until 2020 and to gain transparency over the use and discharge of chemicals.

The goal is to protect water resources and improve environmental and human health both at production and in surrounding communities.

In the additionally submitted Closed Loop Commitment, we also commit ourselves to closing our products' material cycles as best we can.

The commitment covers the textile value chain with a focus on wet-processes like dyeing, printing, washing (Detox) and end of life consumption (Closed Loop).

**This report covers the progress that Tchibo made on the path to clean textile production not only in 2019 but since the start of our Detox program.**

VIEW/DOWNLOAD: [Tchibo Detox Commitment 2014](#)



# Detox in Numbers

## Key Milestones



**89%**  
sustainable cotton



**100%** chrome-free leather since 2016



**33%**  
of Tchibo textile products from GOTS certified wet processing factories



More than **1,5 million** dope dyed products since 2018

**96%** Supply chain transparency for textile products produced in 2019



**63%** wet processing factories with valid waste water test

**96%** Moved from 0% transparency rate in 2014 to transparency rate in 2019

**67%** of Tchibo's wet processing factories registered on ZDHC Gateway™



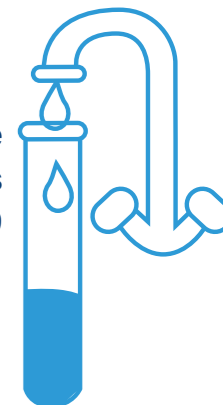
**64** Corrective action plans received from wet processing factories



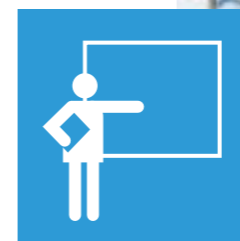
**38%** wet processing factories managing chemical inputs by regular inventory checks



**406** waste water samples taken in 2019



**21%** decrease in detection rates of critical chemicals in waste water since 2016



Out of **56** factories that have successfully completed CPI<sub>2</sub> online basic training, **95%** have achieved bronze level certificate

**47** wet processing factories have been qualified by Tchibo's advanced chemical management training program since 2016 – the average improvement rate was **25%**

**86** of Tchibo's wet processing factories registered at CPI<sub>2</sub> since 2017



**61%** of products produced in a Detox qualified wet processing factory in 2019

# Detox – This is how we do it!

*In 2014, Tchibo committed to phase out hazardous chemicals in textile production until 2020 by signing the Greenpeace Detox Commitment. Over the past years, Tchibo has worked on the key tasks arising from the commitment and made relevant progress towards the elimination of hazardous chemicals from its supply chain. We have worked in 5 workstreams.*

1) **STAKEHOLDER  
COLLABORATION**

To promote the industry-wide implementation of the Detox standards, the textile sector needs to engage collectively. Therefore, Tchibo is part of many multi-stakeholder initiatives and joint collaborations.

2) **MOVING FROM OUTPUT TO  
INPUT MANAGEMENT**

A key task resulting from the Detox commitment was to maintain a Manufacturing Restricted Substance List (MRSL), which specifies to Tchibo suppliers which chemicals must not be used during production. Controlling chemicals not only in the final product, but already at input level in the factory, reflects a substantial mind shift in the fashion industry.



### 3) SUPPLY CHAIN TRANSPARENCY

An important milestone was the rise of transparency on wet processing factories where dyeing and washing processes are carried out. Starting with a 0% transparency rate in 2014, Tchibo has scaled up the rate to 96% in 2019.

have submitted a valid waste water test. The data evaluation of the past four years shows a 21% decrease in detection rates of hazardous substances.

### 4) SUPPLY CHAIN MONITORING

It is verified by waste water testing as well as chemical input monitoring at factory level that no hazardous chemicals are used intentionally. In 2019, 63% of all wet processing factories

### 5) SUPPLY CHAIN QUALIFICATION

Over the years, Tchibo has developed many online and offline training solutions for improved chemical management to support suppliers. By today, 61% of Tchibo textile products are produced in a Detox qualified wet processing factory. Greenpeace has endorsed Tchibo for contributing to a "significant improvement" in transforming the fashion industry. However, we know that our work is far from done. Moving beyond 2020, Tchibo will keep up the momentum and scale up its program.



*"Tchibo has made impressive progress towards the elimination of hazardous chemicals. Tchibo stood out as a leader of this paradigm shift in the apparel and footwear industry, exceeding expectations."*

DR. KIRSTEN BRODDE, GREENPEACE

# Case Study

Over the years, Tchibo has supported many factories to improve its chemical management. The case study below is just one example how a Tchibo factory has improved by joining the 'Detox Program'. Advanced chemical management does not only reduce the environmental impact and improve the health and safety conditions for workers but also lowers production costs and improves product quality!

## FACTORY CASE STUDY

FACTORY PROFILE:  
LOCATION: Shaoxing/China  
PRODUCTION PROCESS: Knitting, Dyeing  
NUMBER OF WORKERS: 578  
PRODUCTION VOLUME: 2.500 t/year

	Performance Level BEFORE	Performance Level AFTER
1) Management System	58%	83%
2) Water Use	55%	89%
3) Chemical Management	31%	63%
4) Waste Water and Waste Management	40%	71%
5) Sustainability and Process Optimisation	0%	25%

Assessment Score per Impact Area/Source: own research



Improvement of chemical handling: An automatic dosing and dispensing system for axillaries has been installed



Improvement of chemical storing: A proper secondary containments for strong alkaline has been built



Improvement of chemical disposal: Empty chemical containers has been disposed properly



# 1) STAKEHOLDER Collaboration

## Zero Discharge Hazardous Chemicals Initiative – ZDHC

Collaboration is fundamental to our work. As Tchibo believes that only collective action can transform the industry, Tchibo became a signatory brand member of the “Zero Discharge Of Hazardous

Chemicals” Initiative (ZDHC) in 2018. We see a number of opportunities in this alliance: firstly, it allows for an industry-wide agreement on a minimum level of engagement in the supply chains.

Secondly, a community consisting of all relevant groups of actors can deal with complex systemic challenges, such as water pollution, much more comprehensively and effectively than individual actors. Finally, a broad-based organization facilitates the joint exchange of experience and thus enhances a more efficient development of the members’ individual programs. By joining ZDHC, Tchibo became part of an acknowledged network.



**PHOTO:** ZDHC Annual Meeting, November 2019 in Amsterdam/Source: ZDHC

*“Only through collaborative engagement, the industry can move towards zero discharge of hazardous chemicals. Tchibo has been a highly engaged member of the ZDHC driving the global implementation of ZDHC’s sustainable chemical management framework.”*

CHARLES DICKINSON, ZDHC BOARD CHAIR



PHOTO: ZDHC Annual Meeting, November 2019 in Amsterdam/Source: ZDHC

## ROADMAP TO ZERO

**About ZDHC** The “ZDHC Roadmap to Zero Programme” is a collaborative initiative of fashion brands, chemical suppliers, manufacturers and laboratories working to reduce the chemical footprint of apparel and footwear.

By today, the ZDHC has grown to a global community with over 150 contributors, including 30 signatory brands, over 100 value chain affiliates, and 19 associates. The ZDHC has shifted the industry’s mindset, from a focus on testing the final product, to managing input chemistry. Several chemical management tools have been created which are designed to enable the industry to move towards zero discharge.

FIND MORE INFORMATION ON: <https://www.roadmaptozero.com/>

FIND MORE INFORMATION ON: <https://www.textilbuendnis.com/en/>

## German Partnership for Sustainable Textiles

Since 2015, Tchibo is a member of the German “Partnership for Sustainable Textiles”, a multi-stakeholder initiative with about 120 member brands. The partnership was initiated by Germany’s Federal Ministry for Economic Cooperation and Development (BMZ) and strives to improve the social and environmental conditions within the global textile production.



As part of its membership, Tchibo is engaged in several working groups and has been involved in the development of practical guidelines and instruments that facilitate the implementation of good chemical management:

- **Short Videos:** Training videos have been produced to support the general raising of awareness towards basic knowledge in the field of chemical management
- **Guidelines:** A written information handbook for suppliers on how to improve chemical management is provided
- **Chemical Inventory Template:** In order to facilitate a consistent format when inventorying chemicals used in textile production, a template has been jointly developed in consultation with the ZDHC
- **Fact Sheets:** Tchibo has participated in the publication of chemical fact sheets to share knowledge and awareness as well as substitution options on critical substances
- **Trainer Pool and Training Materials:** To improve chemical management among suppliers, a “Basic Training” as well as an “Advanced Training” has been developed. All training materials are available free of charge. Furthermore, via a training-of-trainers a pool of qualified chemical management trainers has been set up.

VIEW/DOWNLOAD: [Material and Tools for Chemical Management](#)

## Grüner Knopf/ Green Button – a new Label for Fair Clothing

In September 2019, Tchibo was one of the first brands to attend the introduction of Germany’s new Grüner Knopf (Green Button) seal which was introduced by the German Development Minister Dr. Gerd Müller. The new certification aims to ensure that consumers can purchase clothing that fulfills certain social and environmental standards, including a minimum wage for textile workers, as well as the restriction of certain chemicals and air pollutants.



## Collaborations, Events and Joint Research Projects

The industry-wide implementation of the Detox standards require a comprehensive transformation by all actors – from the chemical industry to producers, retailers, and customers. In order to drive change, Tchibo supports innovative solutions and platforms as well as joint research collaborations. As a key aspect of our work is collaborating with stakeholders in the fashion industry, we like to get out there and talk to people. Throughout the years, we have promoted our water strategy at various events.

**Chemsec Marketplace** Tchibo supports its suppliers to substitute hazardous chemicals used in production with safer alternatives. Since June 2018 Tchibo is an official “Chemsec Marketplace” signatory and supporter – a website where buyers and sellers of safe chemicals can interact.

**Project: Strategies for Sustainable Chemistry by 2030** As part of its contribution to academic research, Tchibo supported a project on strategies for sustainable chemistry by participating in a project at the Darmstadt University of Applied Sciences. The project was funded by the German Federal Foundation for the Environment, and carried out by the Society for Institutional Analysis (sofia) in cooperation with Bundesverband der Deutschen Sportartikel-Industrie e.V. (BSI) and the TEGEWA e.V. The final report was published in May 2018.

FIND MORE INFORMATION ON [Project Sofia](#)

FIND MORE INFORMATION ON <https://marketplace.chemsec.org/>

*As a key aspect of our work is collaborating with stakeholders, we like to get out there and talk to people – we will only be able to address complex challenges by forming alliances*



PHOTO: Tchibo promoting sustainable water use at The NEONYT Conference, January 2019 in Berlin / Source: Daniel Gebhardt Photography

### Project: LIFE AskREACH

LIFE AskREACH is a joint research project scheduled from 2017 to 2022 implemented by 20 partners in 13 EU member states. During the project, a material data system (MDS database) will be developed which can be filled with information on SVHCs (substances of very high concern) in

products. The database will be connected to a smartphone application (app) for consumers. The project aims to raise supplier awareness of their obligation to comply with REACH regulation as well as to improve the information flow on SVHC communication processes in the supply chain.

FIND MORE INFORMATION ON <https://www.askreach.eu/>

# 2) MOVING FROM Output to Input Management

## Mind Shift: From RSL to MRSL

Tchibo continued the intensive work on the development of its chemical product (RSL) and production requirements (MRSL).

**Output Management:** During the annual review, the Tchibo RSL was updated on aligned requirements for Tchibo product categories. New substances were included, and threshold limits were adapted. Where applicable for Tchibo products, chemical requirements were harmonized with the AFIRM RSL and the Global Organic Textile Standard (GOTS). The RSL remains an important output management tool and a safety net to ensure chemical product compliance and consumer safety.

**Input Management:** Focusing on the clean input in production, the textile and chemical industry have made significant developments in the past years to substitute hazardous substances. As a member of the German "Partnership for Sustainable Textiles", Tchibo jointly worked with other brands and retailers in working groups on chemical input management. Consistent frameworks across the industry can be a solid base for the successful implementation and permanent maintenance of Tchibo's Detox targets and achievements. In 2018, Tchibo became a member of the "Zero Discharge Of Hazardous Chemicals" Initiative (ZDHC) and as of 2020 adopted the ZDHC MRSL comprehensively rather than focusing on own brand specific MRSL requirements.

This decision was the result of a detailed comparison of the ZDHC MRSL in Version 2.0 and the Tchibo MRSL. The ZDHC MRSL is already accepted as an industry standard in various production countries followed by chemical suppliers manufacturers and the German "Partnership for Sustainable Textiles". Tchibo pursues the target to support the positive movement and share technical expertise and five years of Detox experience with other experts and actors in the market. By adopting the joint industry approach, Tchibo expects to achieve multiplied effects in the textile industry globally.

Certain product specific chemical requirements, such as ban of all perfluorinated compounds (PFCs), ban of biocidal finishing agents or the ban of chromium salts in tanning of leather will be further pursued. The requirements have been transferred completely to Tchibo product specifications and supplier contracts. Hereby, Tchibo directly supports the elimination of hazardous substances in the supply chains of Tchibo products.

[VIEW/DOWNLOAD: ZDHC MRSL 2.0](#) ←

### DID YOU KNOW?



#### **RSL = Restricted Substances List**

contains chemicals which are either completely prohibited or restricted above certain threshold levels in final products e.g. T-Shirt.



#### **MRSL = Manufacturing Restricted Substances List**

contains chemicals which are either completely prohibited or restricted above certain threshold levels in production processes.

### Clean Product Design

The exclusion of hazardous chemicals in production starts with clean product design. Tchibo bans certain functional requirements (e.g. PFC-derived oil-repellency) for its textiles as well as certain finishing treatment processes (e.g. chlorine bleaching) during production. Specific product restrictions and production specifications apply for water repellent clothing, denim, leather and antimicrobial textiles.



100% Chrome-Free Leather

**LEATHER** To avoid environmental pollution with chromium salts, as well as negative effects of chromium on workers and consumer safety, Tchibo has banned chromium as a tanning agent. Tchibo only accepts leather that has been tanned without chromium salts. Compliance is monitored by checking the total chromium content of each Tchibo leather product.



**DENIM/USED LOOK** Since 2012, not only sandblasting, but also chemical blasting, i.e. spraying denim articles with chemical bleaching agents such as potassium permanganate (KMnO4) or sodium hypochlorite (NaHClO2) is banned from Tchibo products. These chemicals are commonly used to create a fashionable used look. However, they are critical for the health of the workers as well as the environment. Often, adequate workplace protection is not ensured. Therefore, Tchibo is committed to use environmentally friendly processes, such as mechanical blasting, stone washing, ozone washing, and modern laser techniques.



**ANTIMICROBIAL TEXTILES** Antimicrobial treatments of textiles are supposed to protect against odor generation by killing microorganisms, such as bacteria and mold. Special finishing treatments (e.g. silver), inhibiting bacterial growth are banned for Tchibo products as a precautionary measure, to avoid the negative impact on health and environment (e.g. antimicrobial resistances).



100% PFC Free

**WATER REPELLENT TEXTILES** Due to their controversial environmental properties, Tchibo has started eliminating per- and poly-fluorinated chemicals (PFCs) for water- and soil-repellent finishes and replaced them with alternatives, even before the Detox Commitment was signed. PFCs (including but not limited to C4, C6, C8 and PTFE) are prohibited when processing Tchibo outdoor and rainwear products. Non-PFC based durable water repellents (DWR) are nominated (e.g. ecorepel® from Schoeller Technologies AG). The phasing-out of PFCs for outdoor and rainwear was already achieved during 2016 reporting period.

**DONT'S** No chromium salts in leather tanning  
**DO'S** Preferably vegetable based tanning is applied to leather

**DONT'S** No chemical blasting\* in used look finishing  
\* (= Acid wash/ Potassium Spraying with KMnO4 or Na/ HClO NaClO2)  
**DO'S** Used look is created by modern techniques like laser finishing or ozone washing

**DONT'S** No biocidal or silver finishing

**DO'S** Only PFC- free finishings like ecorepel® can be applied for water repellent effects  
**DONT'S** No PFC finishing

**More Sustainable Production**

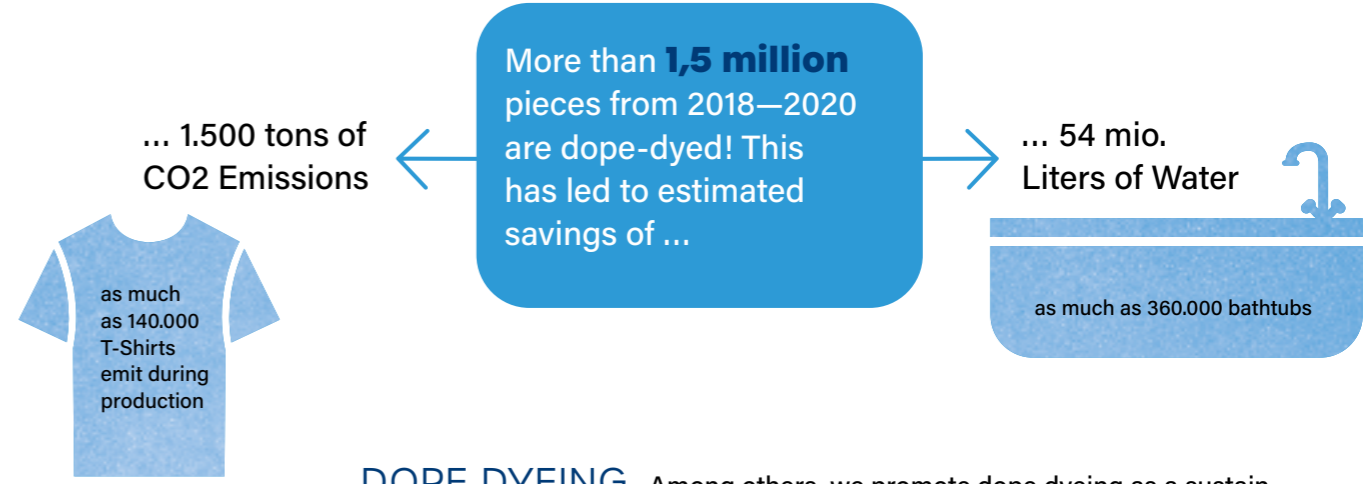
Besides the exclusion of hazardous chemicals in production, Tchibo is also engaged in many pilot projects to promote more sustainable production techniques towards better chemistry. By constantly reviewing latest trends and improvements regarding cleaner production techniques, we not only aim to phase out harmful chemicals but also to improve the overall environmental performance in our supply chain.



**WATER BASED SYNTHETIC LEATHER** Artificial leather is usually made of polyurethane (PU), which must be dissolved before processing. Traditional polymerization involves organic solvents like dimethyl formamide (DMFa), which is classified as toxic and harmful to health when exposed to the skin. Water based PU is an eco-friendly alternative. The PU is dissolved in water instead of DMFa, which results in improved water and air quality as well as highly improved working conditions. Tchibo aims to shift its product portfolio to water based synthetic leather and has started a pilot project in China for DMFa phase out.

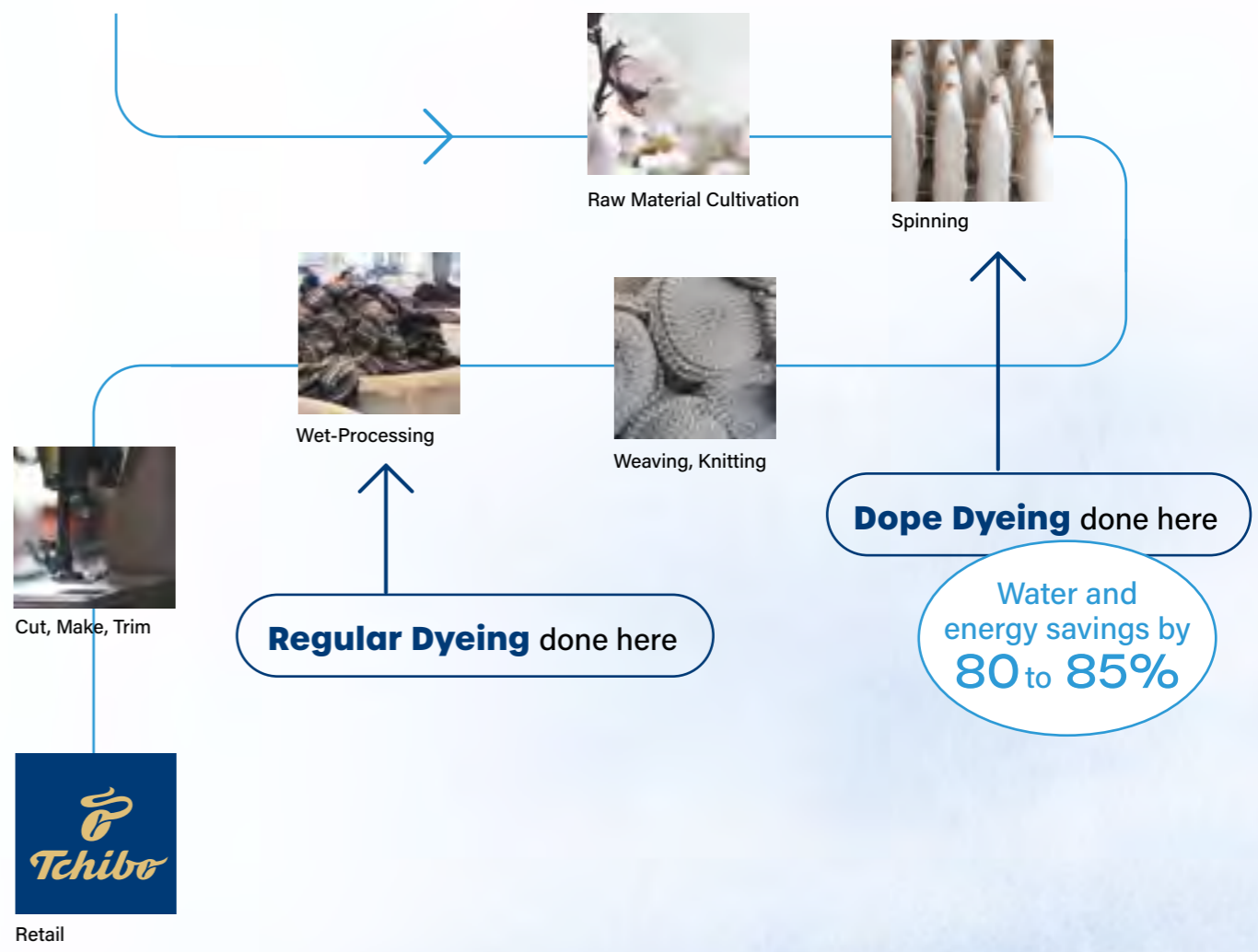


*Tchibo promotes more sustainable production techniques towards better chemistry*



**DOPE DYEING** Among others, we promote dope dyeing as a sustainable dyeing technique that reduces water and chemical consumption as well as carbon dioxide emissions. In this dyeing technique, yarns are dyed during the spinning process which is much earlier than in the conventional dyeing process. This reduces the consumption of water, electricity and carbon dioxide emissions by 80 to 85%. From 2018 to the beginning of 2020, Tchibo produced more than 1,5 million pieces that are dope-dyed! All in all, this has led to a total annual saving of 54 million liters of water as well as 815.000 kWh energy and 1.500 tons of CO<sub>2</sub> emissions.

**WHAT IST DOPE-DYE?**



# 3) SUPPLY CHAIN Transparency

We have moved from a 0% transparency rate in 2014 to a 96% rate in 2019!

Since Tchibo signed the Detox Commitment to eliminate hazardous chemicals in the supply chain in 2014, one of the key aims was to increase the transparency on upstream suppliers who use water and chemicals on a large scale (which are the wet processing factories). After conducting a pilot project with 10 selected suppliers, Tchibo rolled out its transparency process in March 2015. Today the approach is fully integrated into the purchasing process. As a result, Tchibo has received information on the relevant wet processing factories for 96% of all textile products produced in 2019. Apart from a few vertical integrated suppliers where sewing and wet processing takes place in the same factory, we started with a 0% transparency rate and scaled up the rate to 86% in 2016 and 96% in 2019.

In 2019, 308 wet processing factories were identified altogether, spread across 24 countries. Most factories are in China (56%). Other countries where wet processing for Tchibo products take place are India (12%), Bangladesh (7%), Turkey (6%) and Pakistan (4%).

**Full disclosure:** To increase transparency in the global supply chains, we publish our textile producers and wet processing factories. The list, which we update every six months, includes the names, addresses and countries of all the main factories and wet processing factories that produce for Tchibo.

[VIEW/DOWNLOAD: Tchibo Supplier List](#)

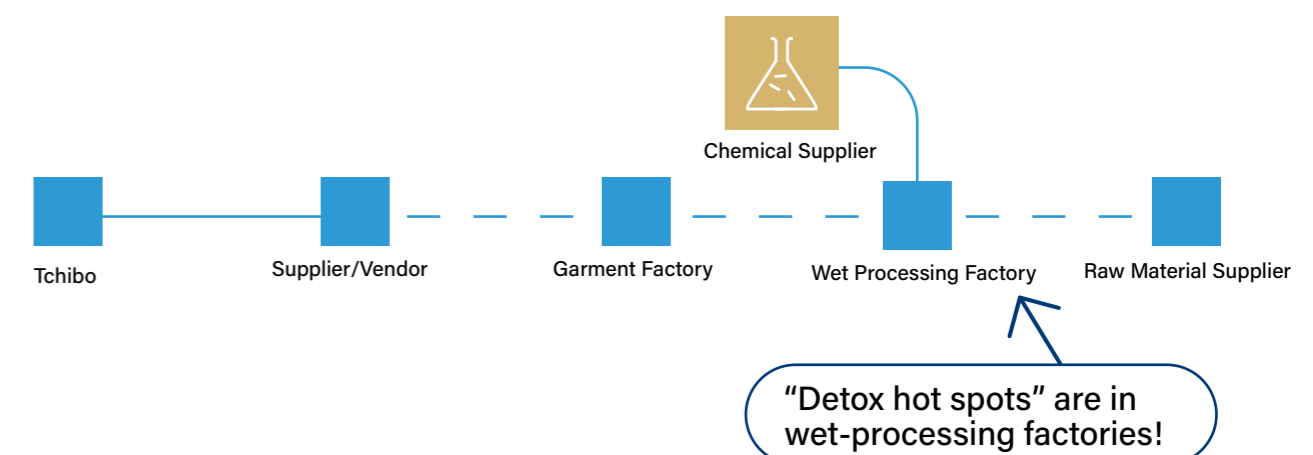
Since April 2019 Tchibo is also a contributor of the Open Apparel Registry, a free open source database and mapping tool of apparel facilities worldwide.

[VIEW/DOWNLOAD: Open Apparel Registry – Tchibo](#)

## WHY DO WE NEED TRANSPARENCY?

The chemical-intensive process steps usually take place in the deeper supply chain in wet processing factories (e.g. dyeing, washing, printing). Therefore full transparency of all suppliers and production processes is the basis to take action and improve chemical management. Supply chains are very

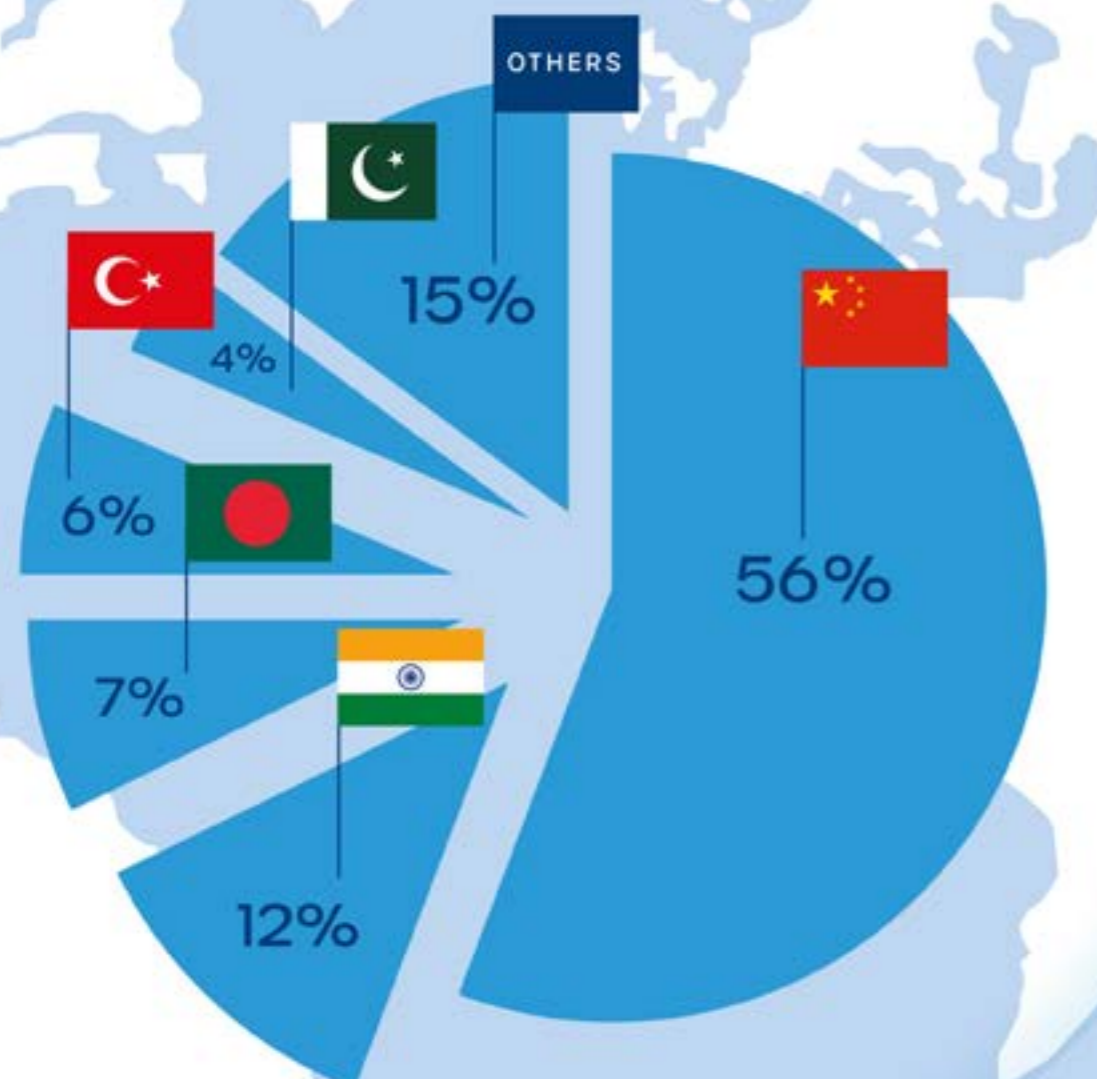
complex. Brands have limited influence on the production processes of upstream factories. There are only direct business connections with the supplier. Despite the huge challenges we are aiming to constantly increase our level of transparency throughout the deeper supply chain.





### Our Global Sourcing Map

The wet processing factories featured on the map are Tchibo's production sites where dyeing, washing and printing takes place. It represents 96% of Tchibo's textile products for sale in our stores and online.



308 wet processing factories 24 countries

# Case Study

The Tchibo 'Detox Program' does not aim to exclude or blacklist suppliers, but to rather improve them. We offer technical on-site support for wet processing factories to support the elimination of hazardous chemicals from their production processes. The case

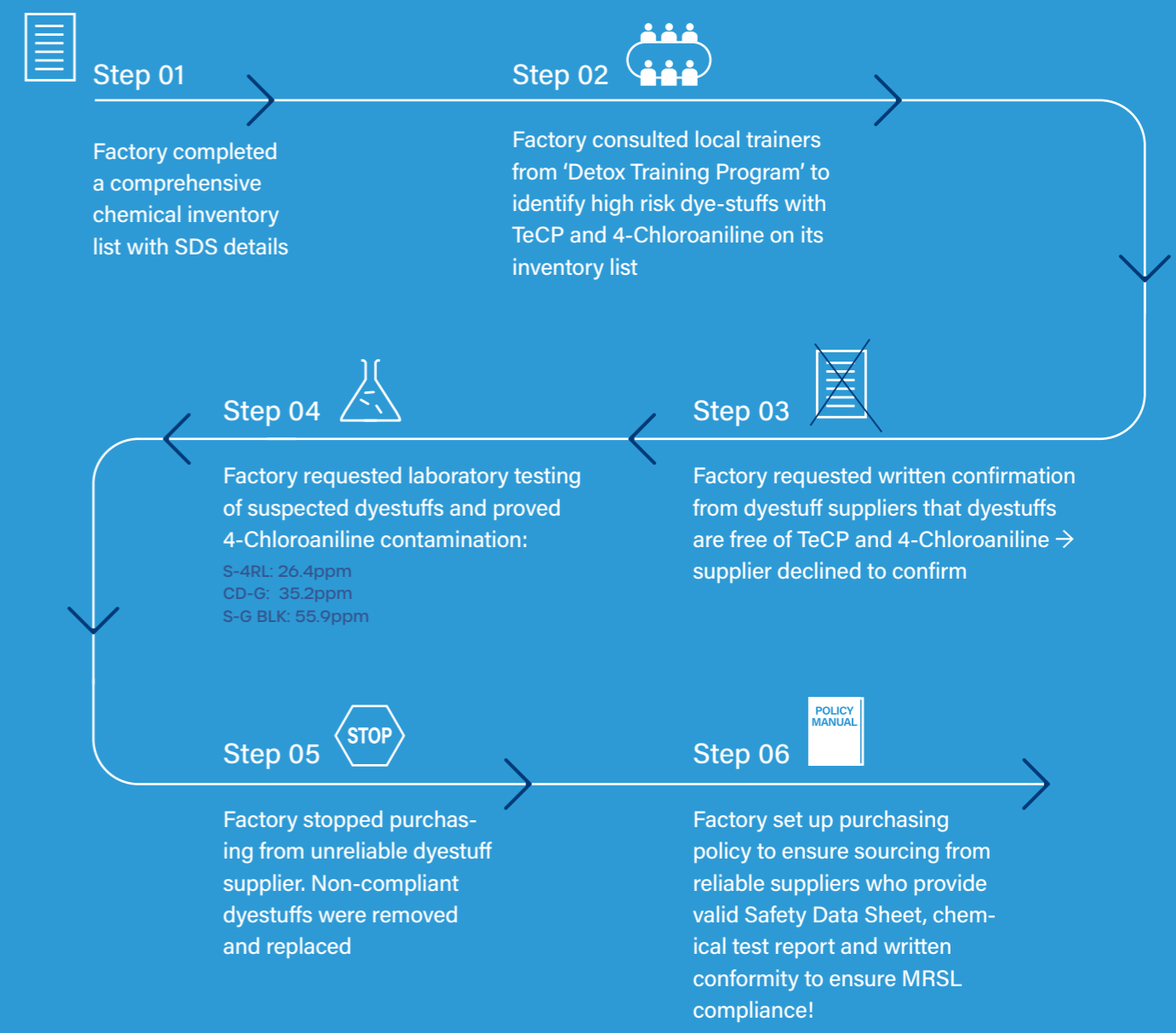
study below summarizes how waste water test fails can be used for a root cause analysis that helps to identify and substitute critical chemicals by more environmentally friendly alternatives.

## CASE STUDY - HOW TO DEAL WITH WASTE WATER FAILS?



A wet processing factory from a long-term key supplier in China has detected TeCP and 4-Chloroaniline in its waste water report. Together with Tchibo's support, they initiated an extensive root cause analysis to eliminate these chemicals in the production.

### ROOT CAUSE ANALYSIS



# 4) SUPPLY CHAIN Monitoring

*Tchibo's wet processing factories* are expected to only use chemicals that are compliant with the MRSL. This is verified by waste water testing as well as chemical input monitoring at factory level.

## Output Monitoring – Waste Water Testing

All wet processing factories in risk countries that are involved in the production of Tchibo products need to provide a waste water test at least once a year. Even though waste water testing is only a snapshot in time, it is a useful tool in creating transparency on the discharge of effluent water containing hazardous chemicals to the environment. Test results not only detect the use of non-compliant chemicals but also indicate insufficient waste water treatment plants.

In 2019, Tchibo has adapted its established waste water testing process towards the ZDHC Gateway™ – a global online platform to register and share and compare verified waste water test data against the ZDHC Waste Water Guidelines. By the end of 2019, 67% of Tchibo's wet processing factories located in risk countries had registered on ZDHC Gateway™. 46% of the wet processing factories uploaded a valid waste water test on the Gateway platform. In addition, 17% provided waste water tests that were not yet uploaded on ZDHC Gateway™. In total Tchibo received waste water tests from 63% of its wet processing factories in 2019.

VIEW/DOWNLOAD: [ZDHC Waste Water Guidelines](#)

FIND MORE INFORMATION: <https://www.roadmaptozero.com/output>

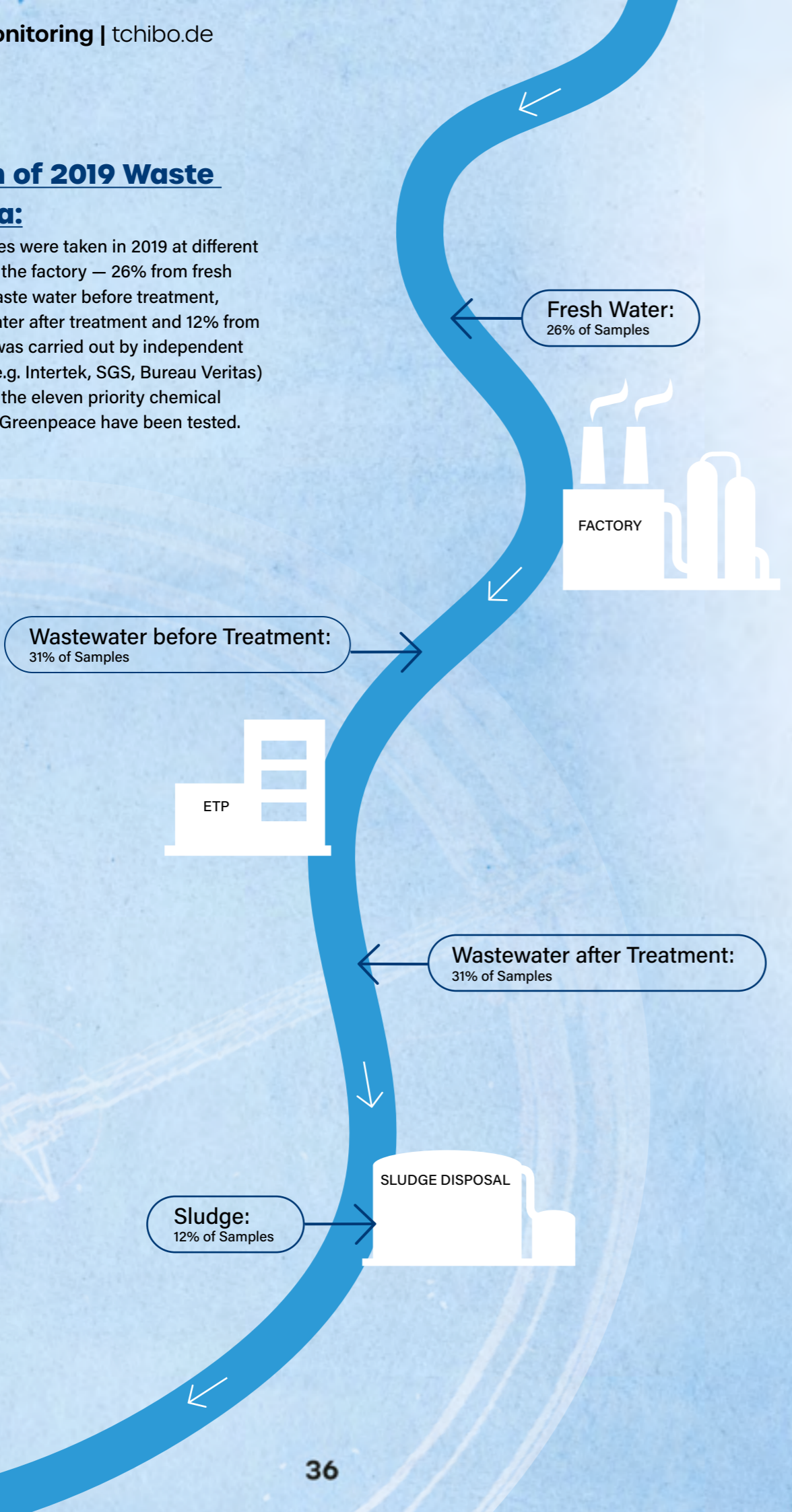


**Full disclosure:** As part of Tchibo's commitment to create transparency over the use of chemicals in its supply chain, all wet processing factories involved in Tchibo production need to publish their waste water test results. The ZDHC has developed a Public Disclosure Portal, which provides a global picture of the supply chain performance with regard to the ZDHC Wastewater Guidelines.

FIND MORE INFORMATION ON: [Public Disclosure Portal](#)

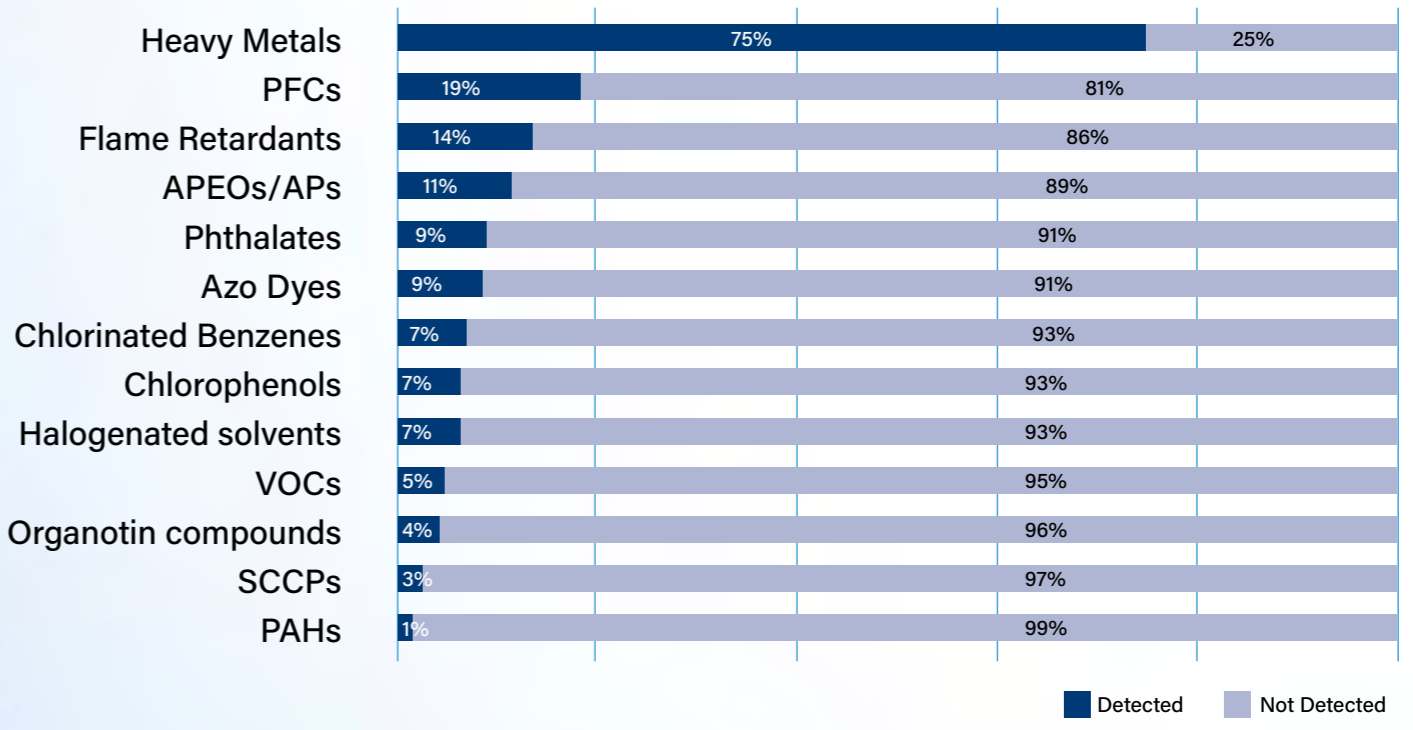
**Evaluation of 2019 Waste Water Data:**

In total, 406 samples were taken in 2019 at different sampling points in the factory — 26% from fresh water, 31% from waste water before treatment, 31% from waste water after treatment and 12% from sludge. Sampling was carried out by independent testing institutes (e.g. Intertek, SGS, Bureau Veritas) and as a minimum the eleven priority chemical groups defined by Greenpeace have been tested.



The chart below shows the detection rate of the eleven priority chemicals based on 183 waste water tests with 406 analyzed samples. The results presented only indicate whether a chemical group was detected based on the respective laboratory's best available measurement methods. They do not allow for any direct conclusions regarding the concentration of harmful substances in the samples taken. The presence of hazardous chemicals in waste water, in small frequencies, could be due to industrial cross-contamination or chemical impurities and does not necessarily indicate intentional use. If hazardous chemicals are found in the waste water, suppliers are requested to submit a "Corrective Action Plan". In 2019, 64 Correction Action Plans have been submitted showing progress in the factories based on testing.

**Detection Rate per Chemical Group 2019**



**TEST RESULTS SHOW THAT:**

- On average, 1,7 chemicals are detected per wet processing factory
- Since the findings are mostly at small frequencies, it can be assumed that they do not result from intentional use during production but rather from industrial cross-contamination or chemical impurities, among other factors
- Especially fresh water (inlet) is already contaminated, which is due to various natural and/or anthropogenic sources (e.g. heavy metals were mainly detected in fresh water)
- However, waste water treatment often does not completely purify process water

**EVALUATION OF 2016–2019**

**WASTE WATER DATA:**

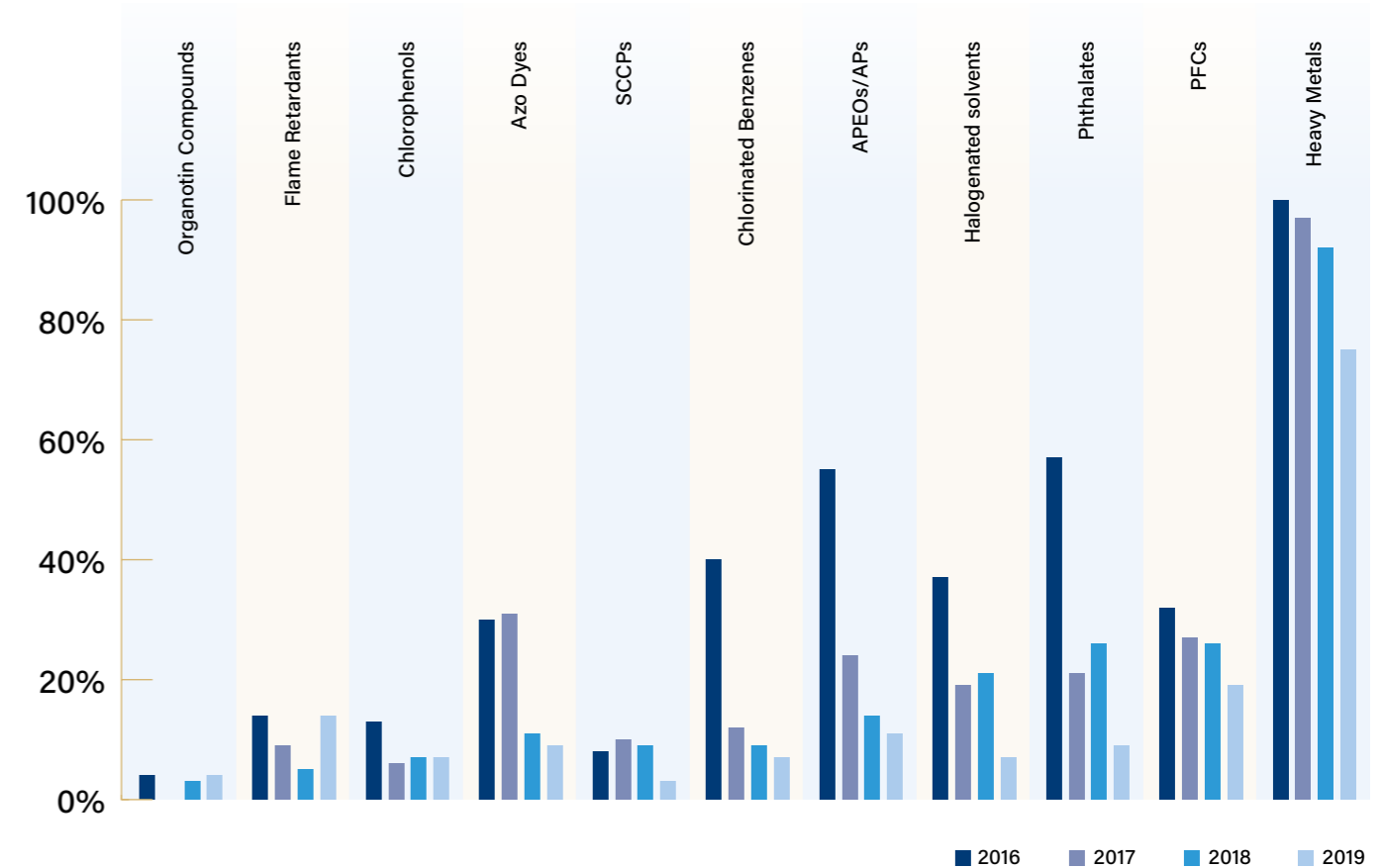
Although waste water tests are only a snapshot, the results show an overall improvement within the past years. The waste water data evaluation of the past four years shows an overall positive development regarding the detection rate of the eleven priority chemicals. Many chemical groups have been found less frequently compared to the results of the last reporting periods with the largest decline observed in Azo Dyes (from 30% in 2016 to 9% in 2019), Chlorinated Benzenes (from 40% in 2016 to 7%), APEOs/APs (from 55% in 2016 to 11% in 2019) as well as Phthalates (from 57% in 2016 to 9% in 2019). Overall, there has been a 21% decrease in detection rates of hazardous substances since 2016.

However, the detection rate for heavy metals shows a slight decrease but continues to have the highest detection rate by far. We see this as a call for action to further improve chemical management in our supply chains. Even though, the presence of chemicals in the waste water, in small frequencies, could be due to industrial cross-contamination or chemical impurities and do not necessarily indicate intentional use, Tchibo is aiming to further decrease detection rates over the next years.

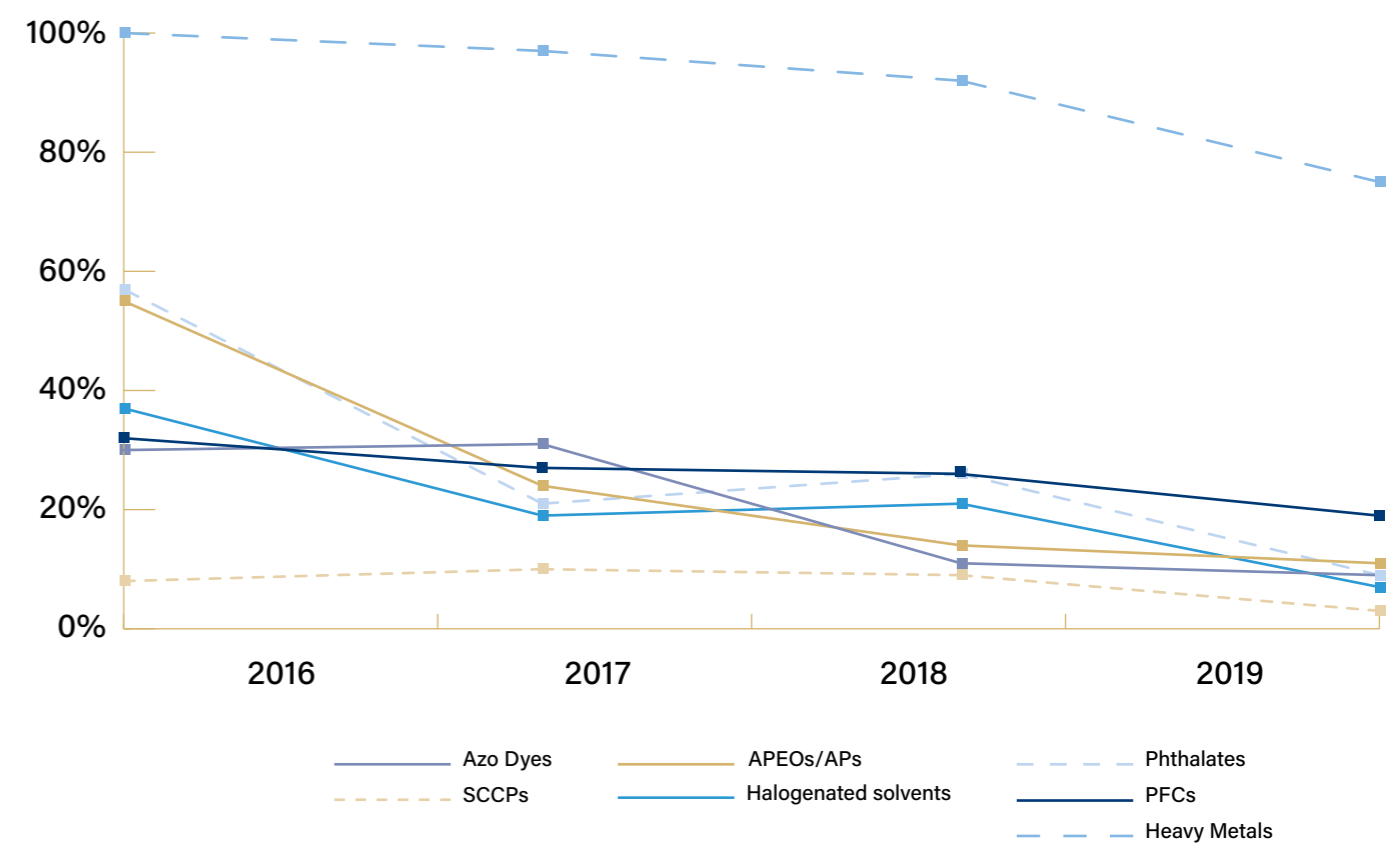
*The Tchibo Detox Program has contributed to a significant reduction of discharge of hazardous chemicals into the environment!*



**Detection Rate per Chemical Group from 2016–2019**



**Improvements in Detection Rates from 2016–2019**



# Input Monitoring – Chemical Input Management

In addition to output monitoring, Tchibo is aiming to transform the industry towards better management of input chemistry. By managing chemical inputs, safer textile products as well as cleaner water can be ensured.

Tchibo is encouraging its suppliers to use the Chemical Module of the ZDHC Gateway™, a database which allows to check conformance of a chemical product with the ZDHC MRSL. Chemical suppliers use this platform to upload their chemical products and ensure MRSL conformance. For factories it simplifies the search for more sustainable chemicals.

Further, all suppliers need to maintain an inventory list of all chemicals used and stored in their factory. Chemical inventory conformance towards ZDHC MRSL can be verified by different tools e.g. by generating an InCheck™ Report through ZDHC Gateway™, by inventory management using the CleanChain platform or by using the BHive application. All tools aim for transparency of input chemicals in order to prove the ZDHC MRSL compliance of producers inventory lists.

Tchibo is currently piloting different approaches and the wet processing factories use different tools to control their input chemistry. In 2019, 46% of all Tchibo wet processing factories have used at least one of the chemical input management tools and therefore contributed to the paradigm shift in the industry to move from output to input monitoring of chemicals.



PHOTO: Dyeing Factory in China/Source: Tchibo



PHOTO: Waste Water Treatment Plant/Source: Tchibo

FIND MORE INFORMATION ON DIFFERENT CHEMICAL INPUT TOOLS:

- <https://www.roadmaptozero.com/input>
- <https://www.cleanchain.adec-innovations.com/>
- <https://www.thehive.net/>

*In addition* to web-based solutions for chemical input management, Tchibo works on the ground with selected wet processing factories to support clean production. In case there are chemical failures in the final product or waste water test, we conduct on-site consultancy to find out the root cause of the failures.

To identify the source of hazardous chemicals during production processes, on-site sampling of chemicals and raw materials as well as inspection of management processes at a factory is conducted by a third-party service provider. Based on the results, suppliers are supported to replace input chemicals and find safer alternatives that are compliant with Tchibo requirements. In 2019, Tchibo has worked with factories to find individual solutions for APEO phase out and how to shift to DMFa-free synthetic leather. Case studies have been developed to share learnings also with other supply chain partners.

PHOTO: Dyeing Factory in China/Source: Tchibo

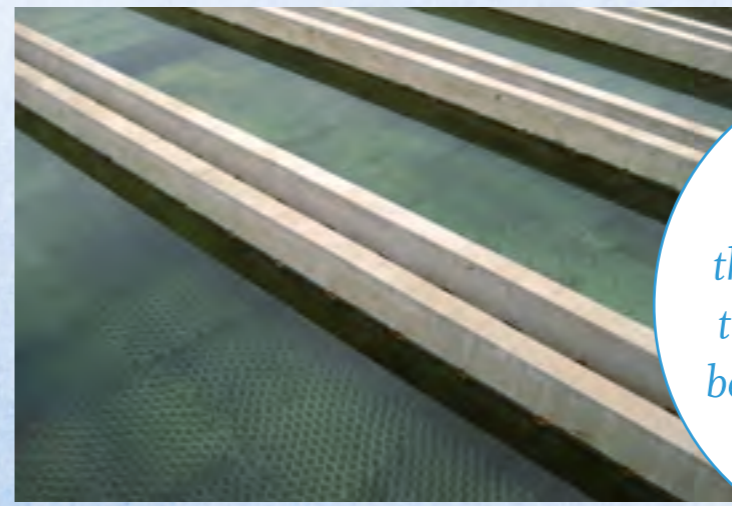


PHOTO: Waste Water Treatment Plant/Source: Tchibo

*Tchibo is supporting the transformation of the industry towards better management of input chemistry!*

# 5) SUPPLY CHAIN Qualification

## Detox Supplier Handbook

Tchibo supports its wet processing factories to improve their environmental performance. Tchibo provides its suppliers with a written handbook that gives operational support for implementing Tchibo requirements on improved chemical management. The latest update has been published in February 2019 and is publicly available for download in English and Chinese.



VIEW/DOWNLOAD: **Detox Supplier Handbook 3.0**



## CPI<sub>2</sub> Online Training

In addition to written support, Tchibo offers its suppliers an online training tool that includes knowledge modules on water, energy and chemical management.

It is based on the "Carbon Performance Improvement Initiative" (CPI<sub>2</sub>), which was founded by Tchibo and eight other brands in 2011. The initiative has developed an online tool to reduce the environmental impact in factories. The webtool provides textile factories with individual recommendations on how they can reduce energy

consumption and thus greenhouse gas emissions in production, and how they can optimize their water and chemical management. The factories are supported with a total of 400 recommendations, each including implementation guidelines, benefits and investment costs as well as the expected payback period. In addition, there are more than 150 case studies and best practice examples. In this way, the factories learn how they can optimize their water and chemical management.

In total, 86 Tchibo wet processing factories have registered on the online platform since 2017 (of which 29 in 2019). Out of the 56 factories that have successfully completed the training modules, 95% have at least achieved a certificate at bronze level.

FIND MORE INFORMATION ON: <https://www.cpi2.org/>

### Change Labs

In 2015, Tchibo has developed a new approach for co-creating business strategies with representatives of all levels in the Tchibo supply chain. Two Change Labs have been hosted in Hong Kong (2015) and Hamburg (2016). Interactive workshop sessions aimed at jointly developing Detox solutions together with Tchibo colleagues, key suppliers, stakeholders and external experts. In total 39 participants have contributed to the Think Tank, which outcomes have significantly shaped today's Detox Program at Tchibo.

### Basic Training on Chemical Management

As part of its engagement in the German "Partnership for Sustainable Textiles", Tchibo has supported the development of a Basic Training workshop — a one-day modular training to impart basic knowledge in the field of chemical management. The training is aimed at CEOs and middle management in factories with wet processes and consists of a combination of lectures, examples and exercises. The Basic Training thus helps to take the first steps towards establishing sustainable chemical management. Tchibo suppliers participated in the training in Pakistan in December 2018 and in Istanbul in September 2019.

FIND MORE INFORMATION ON Partnership Basic Trainings



PHOTO: Participants of Basic Training, December 2018 in Lahore, Pakistan / Source: GIZ



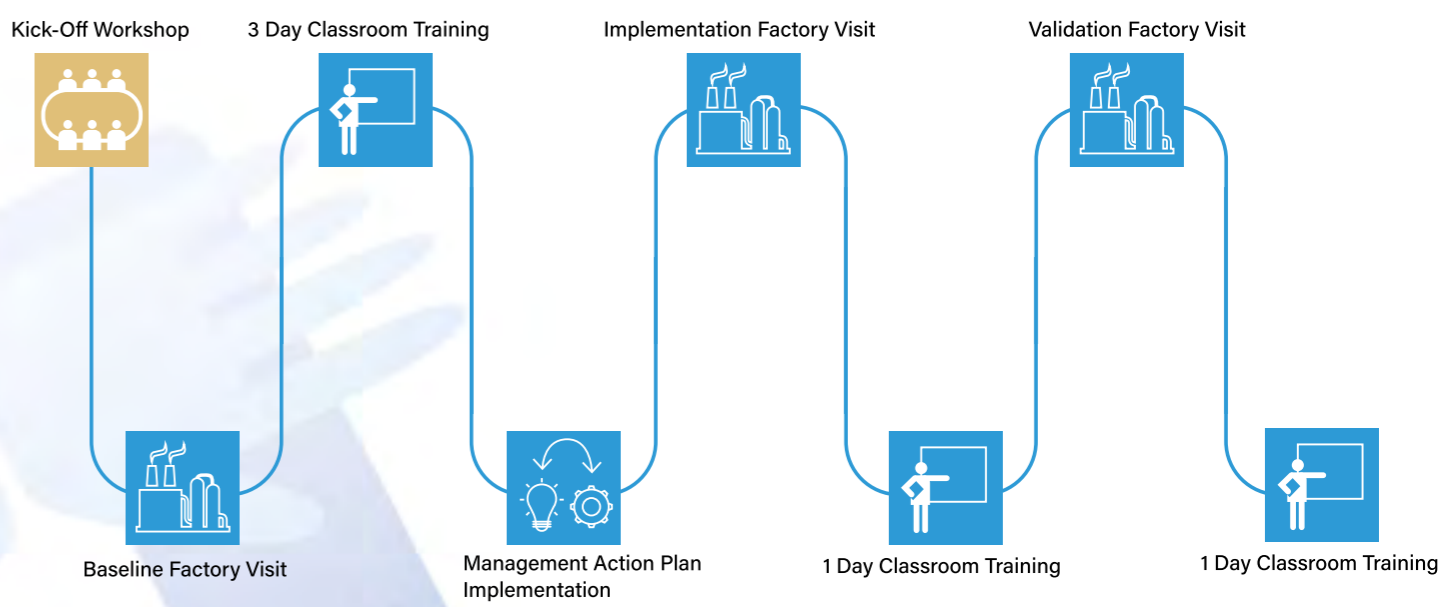
PHOTO: Participants of Basic Training, September 2019 in Istanbul, Turkey / Source: GIZ

### Advanced Training on Chemical Management – Strategic Alliance

As we will only be able to address complex and systemic challenges by forming an alliance with stakeholders, Tchibo teamed up with the REWE Group and the "Deutsche Gesellschaft für Internationale Zusammenarbeit" (GIZ) under the develoPPP program by the Federal Ministry for Economic Cooperation and Development to develop and implement a qualification program for textile wet processing factories in 2016. The project aims at developing local trainer

capacities in China and Bangladesh to support factories to improve their chemical management. It is scheduled to run for three years until end 2020 and has an investment volume of 2.3 Million Euros. Wet processing factories that participate in the program are trained for up to 12 months including six workshop days and three factory visits. Between these activities, the factory works on the implementation of its "Management Action Plan" (MAP) and thus improves its individual performance.

### The Trainings Cycle



*"Factories are willing to share their challenges and solutions, I learn and benefit a lot from it"*

SUPPLIER FEEDBACK

*"In sharing session, I read many good practices on daily chemical management from other factories, broaden my horizon and recognized my room for improvement"*

SUPPLIER FEEDBACK



PHOTOS: Training Workshops with Suppliers and Expert Partners of the Program / Source: Strategic Alliance



BILDER Itatent laborer chillore

During the 2017 reporting period, the training concept and materials were developed, and coordinated with key stakeholders like the ZDHC and the German "Partnership for Sustainable Textiles". In addition, 16 trainers were trained in Bangladesh and 21 in China.

In 2018, a total of 20 wet processing factories who supply to Tchibo and REWE Group completed the first training curriculum. The factories worked on improvement in five key areas: 1) Management System, 2) Water Use, 3) Chemical Management,

4) Waste Water and Waste Management and 5) Sustainability and Process Optimization. By participating in the program, they were able to increase their performance on average by 27%.

After the pilot phase, the program was opened to further brand retailers such as ALDI North, ALDI South and Otto Group, who joined the rollout phase of the training program in 2019. A total of 27 wet processing factories who supply to these brands completed the training program in 2019 with an average improvement rate of 26%. The highest improvement rate of 34% was in the area of "Chemical Management". In total 7,518 workers work in these trained factories and benefit from improvements.

Until today, 47 wet processing factories have successfully completed the training out of which 24 factories are part of today's Tchibo supplier portfolio. Only in 2019, these trained factories provided 22% of Tchibo's textile business volume.

2019 Average Improvement Rate of 26%

Average improvement rate of participating factories during 2019 training phase

	1) Management System	2) Water Use	3) Chemical Management	4) Waste Water and Waste Management	5) Sustainability and Process Optimisation	Average
Bangladesh (10 factories)	+ 40%	+ 25%	+ 59%	+ 31%	+ 26%	+ 36%
China (17 factories)	+ 26%	+ 12%	+ 19%	+ 17%	+ 18%	+ 18%
Total	+ 31%	+ 19%	+ 34%	+ 22%	+ 24%	+26%



# Beyond Detox

— From Water  
Management  
to Water  
Stewardship

**Sustainable** *water management has become one of our strategic priorities. By growing coffee and cotton and by manufacturing our non-food products, we are not only partly responsible for the pollution and scarcity of water but are also directly affected by risks like water shortages and supply chain disruption.*

In 2018, we teamed up with the WWF to take a closer look at specific water risks linked to Tchibo's product portfolio. Using the WWF Water Risk Filter, an online tool to analyze water risks globally, we identified the trends connected to physical water risk (scarcity, floods, droughts and pollution),

regulatory water risk (policies and governance) and reputational water risk (media attention and cultural implications). The assessment is based on farmers and factories geographic locations and the results help to better understand where and how Tchibo is exposed to water risks!

VIEW/DOWNLOAD: [Tchibo Water Report](#)

FIND MORE INFORMATION ON: <https://waterriskfilter.panda.org/>

FIND MORE INFORMATION ON: [WWF Water Stewardship Projects](#)



### TURNING RISK INTO OPPORTUNITY AND ACTION

Tchibo started a partnership with WWF in 2019 to target the identified water risk. WWF has been driving the adoption and implementation of Water Stewardship in the textile sector for many years. With the support of international brands and local partners, WWF has established water stewardship projects in several countries. In 2019, Tchibo joined two multi-stakeholder projects in China and Turkey.

*“Tchibo has been the first German textile brand with a serious commitment to water stewardship – their engagement in critical river basins is an important contribution to more sustainable water resource management.”*

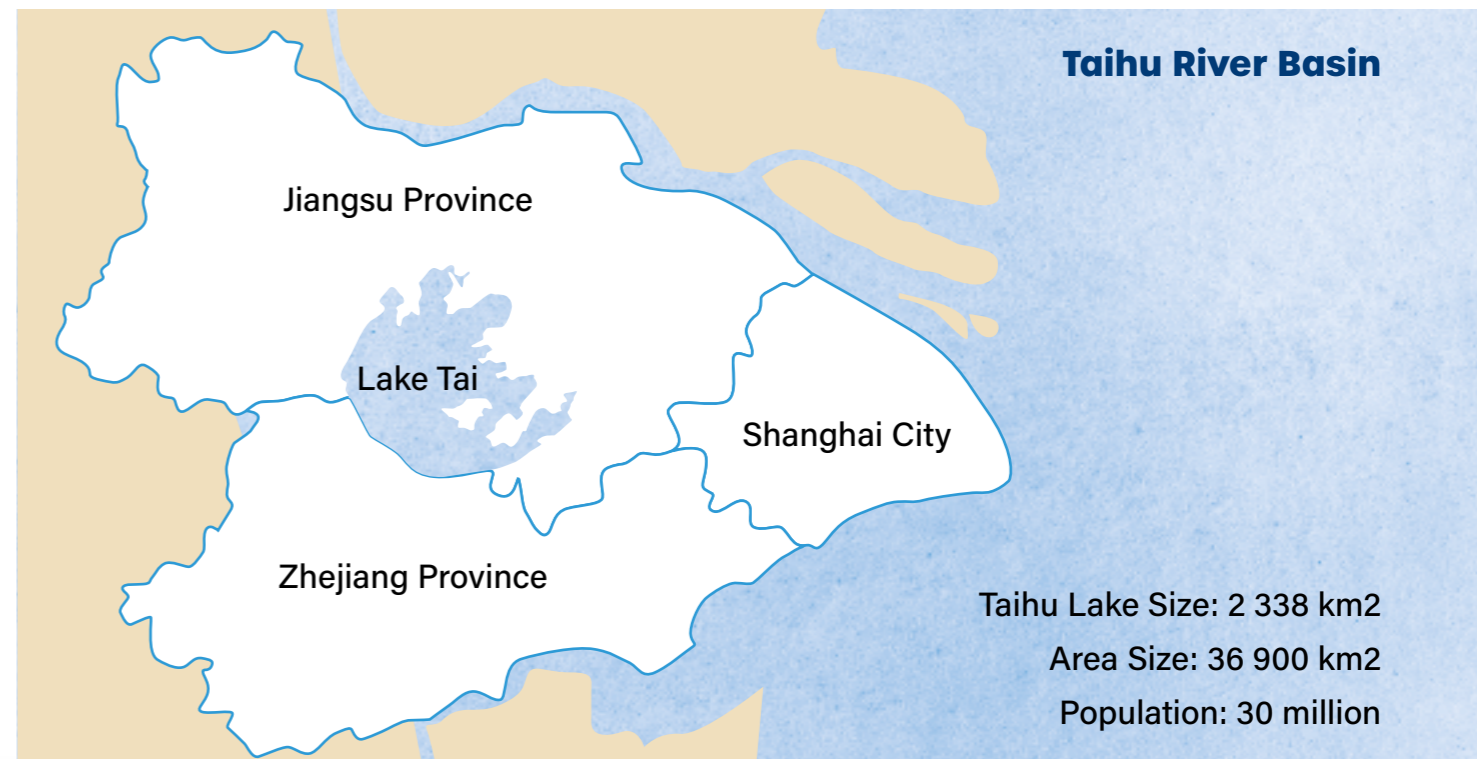
JOHANNES SCHMIESTER, WWF GERMANY

### CHINA – TAIHU LAKE BASIN

China is undoubtedly the major water risk country in Tchibo's textile portfolio. The Taihu Basin shows the highest water risks in relation to business relevance for Tchibo. Wet processing factories in that area are covering two thirds of Tchibo's total production volume in China. The WWF project aims to improve the conditions of the river basin and reduce shared water risks for business, ecosystem and communities. Improved freshwater ecosystems and better water governance is achieved by multi-level engagement including not only factories but also industrial park

management as well as governmental authorities through training activities, roundtables and best practice sharing.

Collaborating with other brands in the project, in this case among others H&M and Tommy Hilfiger, is a chance to effectively mitigate Tchibo's suppliers' water risks. In 2019, Tchibo has included 43 of its wet processing factories in the program and supported the 5th Taihu Annual Forum that engages national level policy makers, basin governor, private sectors and NGOs to discuss basin stewardship.

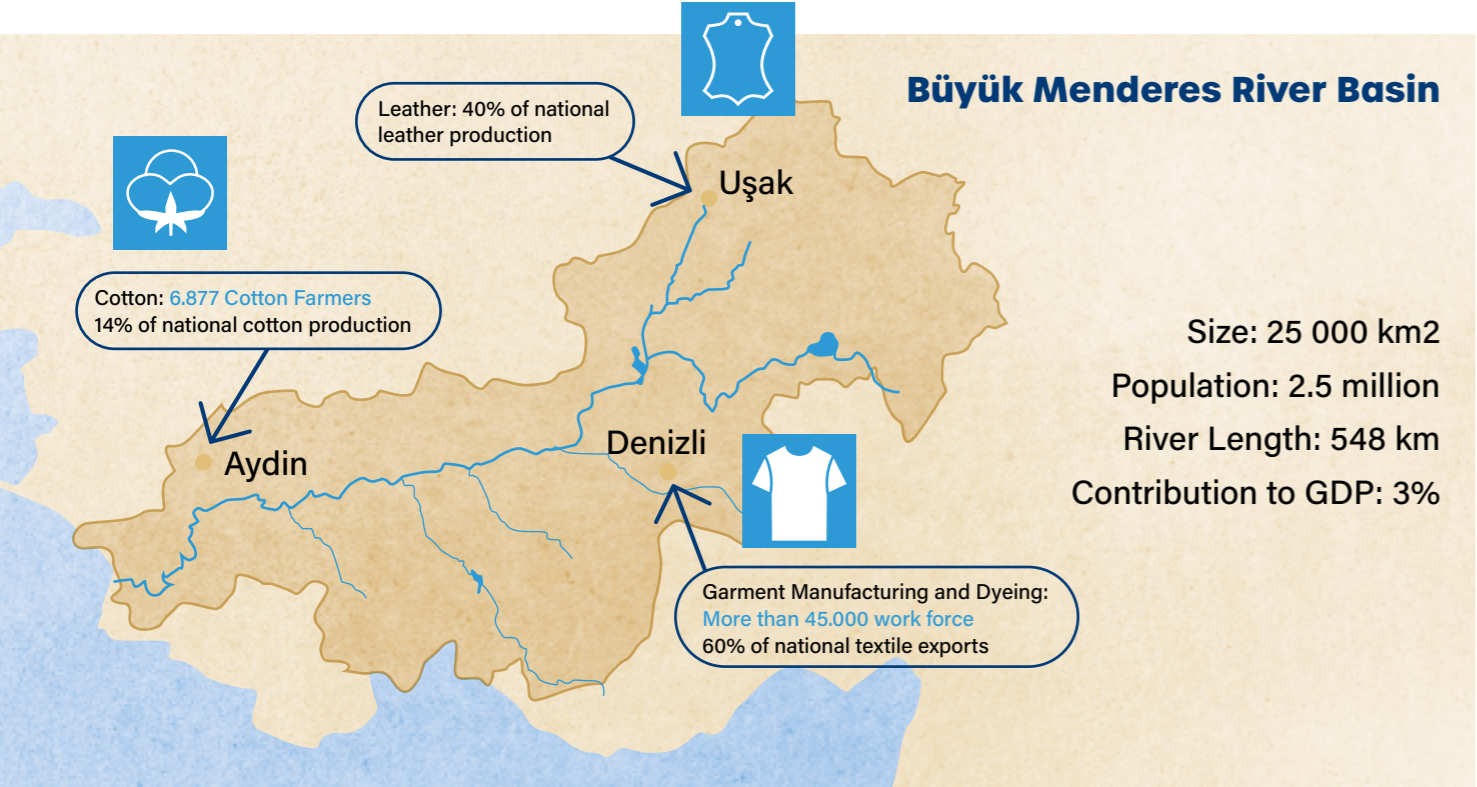


### Turkey – Büyük Menderes Basin

The Büyük Menderes River is Turkey's third most polluted river. The basin holds 40% of the national leather production, 60% of all textile exports of Turkey and 14% of the national cotton production. The river delta is challenged by a lack of river basin management resulting in habitat and biodiversity loss, intense water scarcity due to intensive water use in agriculture and industries as well as poor water quality caused by highly polluted waste water, generated by the textile sector.

The WWF water stewardship project for textiles was initiated with H&M group in 2017, and key partner Ikea has joined in 2018. Tchibo joined in 2019 with a focus on including the cotton sector to the project. The goal is to analyze and identify mechanisms to improve water quantity and quality in cotton production and achieve sustainable supply chains between the cotton and textile sector. Further this project aims to serve as a model of conservation and sustainable use of water resources, that can be scaled up to other basins in Turkey.





Turn hazardous into healthy! Transforming the textile sector's approach to water.

By engaging collectively with other partners from the textile industry, Tchibo is aiming to reduce shared water risks connected to its suppliers, including risks stemming from water governance in countries of production. For 2020 and beyond, we aim to scale up our experiences on the ground and to implement further water stewardship projects in our supply chain. Further we aim to drive the development of an industry approach on how to set science-based water targets in a local watershed context. By engaging with key stakeholders, we hope that more brands will follow in implementing context-based water strategies for a sustainable future on water.

"We will protect water for people and nature in priority basins"

Our Water Future

**Goal:**  
Tchibo is committed to be a good water steward

**Target:**  
Achieving collective action Stewardship projects in all water stressed regions

- Subgoal:**  
Water Stewardship for:
- Coffee cultivation
  - Cotton cultivation
  - Textile wet processing

"Tchibo has committed to water stewardship – not just for business interest but to protect water resources for everyone."

MARIJKE SCHÖTTMER, ENVIRONMENTAL MANAGER TCHIBO



# WHAT IS WATER STEWARDSHIP?

Water Stewardship is the use of water that is socially equitable, environmentally sustainable, and economically beneficial, achieved through a stakeholder-inclusive process that involves site- and basin-based actions. That means we go beyond water management at factory level but also understand water stress in different river basins where the production takes place. Since water is a shared resource it is about collective action working beyond the factory fence. The goal is that brands, factories, communities, public sector and NGOs engage together in collective action to address joint water challenges.

**INFLUENCE GOVERNANCE**

Government incentivised and motivated to manage and invest in water basins in a sustainable way.

**COLLECTIVE ACTION**

Companies, communities, public sector and NGOs are engaged together in collective action to address issues.

**INTERNAL ACTION**

Companies have detailed understanding of impact they and their suppliers have (incl. footprint and risk).

**KNOWLEDGE OF IMPACT**

Companies take action to optimise internal water governance, improve water efficiency and reduce pollution.

**WATER AWARENESS**

Companies, their suppliers and customers have (high level) understanding of the global water challenges, and their dependence on freshwater.

**Steps to implement Water Stewardship**

SOURCE: WWF

# The Way Ahead – Tchibo Vision Post 2020

**In January 2020**, our *Detox Commitment with Greenpeace* ended. As we reflect and summarize the last years of putting our *Detox Commitment* into practice, we see that we have come a long way. As the results in this report show, we have managed important steps towards the aim of eliminating hazardous chemicals from our textile production. We have set valuable milestones for a sustainable chemical management framework. With a clear vision, we now look at the road ahead and will continue our work on safe chemicals with the ZDHC and industry framework.

In 2020 and beyond, we aim to keep up our high level of stakeholder engagement and continue our memberships in various industry initiatives as well as multi-brand projects on the ground. With the shift from output to chemical input management, we completed the development of an MRS L to restrict the use of harmful chemicals in our supply chain. In 2020, we further align with industry

standards and support the implementation of the ZDHC MRS L 2.0 as a consistent framework across the industry.

Waste water tests will still be managed by the ZDHC Gateway™ platform. They remain an important output management tool and a safety net to ensure that no hazardous chemicals are released to the environment. However, we will enhance the

investment in our current Input Management tools, encouraging our suppliers to focus on clean inputs by constantly reviewing their chemical inventory. Tchibo will support by several training tools as well as on-site consultancy if needed.

The implemented monitoring approach scaled up our supply chain transparency. By today, we have gained transparency on the wet processing factories for 96% of our textile products. As this is a great result, we will now focus on enhancing the transparency level to the deeper supply chain (including spinning unites and farmers) as well as subsequently scaling up our learnings to other product groups going beyond textiles.

We constantly aim to improve and are striving for even more sufficient supplier communication and data tracking in the future. We revise management processes to provide accessible, up-to-date information whenever it is neededwhile using synergies with other supply chain members. To summarize, this is just a glimpse of what we want to accomplish – there is still a lot more to reach for! Tchibo will keep up the momentum and scale up its efforts. We do not only want to raise awareness in the industry on the environmental impact of certain production processes, we want to be an active driver for change.

*“As the DETOX campaign moves beyond its 2020 deadline, we encourage Tchibo to continue to clean up its supply chains by expanding the Detox scope beyond fashion and scale up its achievements.”*

DR. KIRSTEN BRODDE, GREENPEACE

*Our road to the future:  
**Brave, Fair and Honest**  
Our vision: Shaping a business that cares about people and planet – every day.*

## **Imprint**

Tchibo GmbH

Überseering 18 | 22297 Hamburg

[detox@tchibo.de](mailto:detox@tchibo.de) | [www.tchibo.com](http://www.tchibo.com)

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