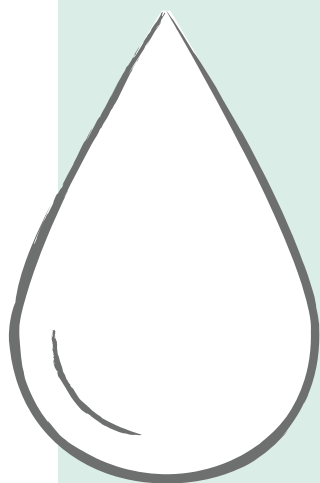


REWE GROUP
DETOX PROGRAM

Detox Progress Report 2019



We are dedicated to
eliminating harmful
chemicals in the production
and supply chain of private
label clothing, home textiles
and footwear.



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List of abbreviations

APEOs	Alkylphenol ethoxylates
APs	Alkylphenols
BMZ	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (German Federal Ministry for Economic Cooperation and Development)
CmiA	Cotton made in Africa
DMF	Nitrosamines and dimethylformamide
GIZ	Gesellschaft für Internationale Zusammenarbeit (German Corporation for International Cooperation)
GOTS	Global Organic Textile Standard
IPE	Institute for Public and Environmental Affairs
MRSL	Manufacturing Restricted Substance List
PAHs	Polycyclic aromatic hydrocarbons
PFCs	Polyfluorinated and perfluorinated compounds
RSL	Restricted Substance List
STeP	Sustainable Textile Production
ZDHC	Zero Discharge of Hazardous Chemicals

I. FOREWORD

Ladies and Gentlemen,

As an internationally operating trading company, we aim at offering our customers high quality products and services. The manufacture of REWE Group's private label products has social and ecological impacts, i.e. impacts on people, animals and the environment. REWE Group's customers expect and trust that our company is aware of its responsibility in the supply chains of its private label products and addresses the effects. REWE Group wants to meet these expectations.

With our "Green Products 2030 Strategy", we systematically foster our responsibility for people, animals and the environment within the company and the international value chains of our private label products.

REWE Group has formulated the sparing use of water as a principle of its business relationships in the Guideline for Sustainable Business Practices published in 2011. We are faced with the challenge that water bodies are increasingly being contaminated by pollutants, with textile production being one of the most important causes. With this in mind, we joined the Greenpeace Detox Commitment in 2014 and, based on this, developed a program for clothing, shoes and home textiles of our private labels. The goal: to ensure textile production without the use of chemicals that are harmful

to the environment or health. The Greenpeace Detox campaign will officially expire in 2020. Regardless of this, we will continue to make efforts to achieve this goal.

After our Detox Program has been running for five years, it is time to take stock. Since we developed a first roadmap for the elimination of chemicals in the textile supply chain in 2014, we have been able to achieve a lot: An important milestone for us was to create transparency - from our direct suppliers and the manufacturing factories all the way to the producers using wet processes.

Since then, we have been able to track progress using annual wastewater tests and make this progress visible. Conducting various case studies has helped us to gain important insights and to develop solutions.

We were able to acquire important knowledge regarding the use of chemicals in the supply chain. Last but not least, this success is due to the good cooperation with our suppliers. Because only if all players work together can the ecological and social conditions in textile production be systematically improved in the long term. We are aware of the fact that our demands on suppliers are ambitious. For this reason, we support and cooperate with them in the changeover to less hazardous chemicals and are committed to a comprehensive training program.

For the coming years, we have already defined new measures to further reduce the use of hazardous chemicals in the textile supply chain. For this purpose, we will introduce an optimised Detox process with stricter requirements for wet process facilities and continuously expand our cooperation with associations and other companies. In the future, we will work more closely with the "Zero Discharge of Hazardous Chemicals" (ZDHC) initiative to support the standardisation of requirements.

In the present report, we provide comprehensive information on our activities and goals as part of REWE Group's Detox Program and summarise our progress since 2014. We outline what we have achieved, what challenges we are facing and in which areas there is an increased need for action to continue to sustainably improve chemicals management.

We wish you an informative and insightful read and look forward to a constructive exchange of ideas.

Dr. Daniela Büchel
Board Member
German food retail
business - REWE Group
Human Resources +
Corporate
Responsibility

Torsten Stau
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Dirk Heim
Head of Sustainability
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II. OBJECTIVE AND APPROACH

As part of its Detox Program, REWE Group has been committed to systematically banning hazardous chemicals from textile production since 2014, as these have negative impacts on people and the environment. In this way, water pollution and damage to health caused by chemicals are to be reduced in a targeted manner.

In order to emphasise its commitment, REWE Group has joined the Greenpeace Detox campaign and has set itself the goal of eliminating all harmful chemicals from the production and supply chain of clothing, home textiles and shoes which are distributed under the private labels of REWE Group's sales lines by 2020. But even after the official Greenpeace Detox campaign has ended, we will continue to make efforts with the aim to work for pollutant-free textile production in the future. Therefore, we will further develop our Detox Program.

The approach of REWE Group's Detox Program comprises the four elements "Chemicals Management", "Supplier Development", "Cooperation and Dialogue" as well as "Closed Loop":

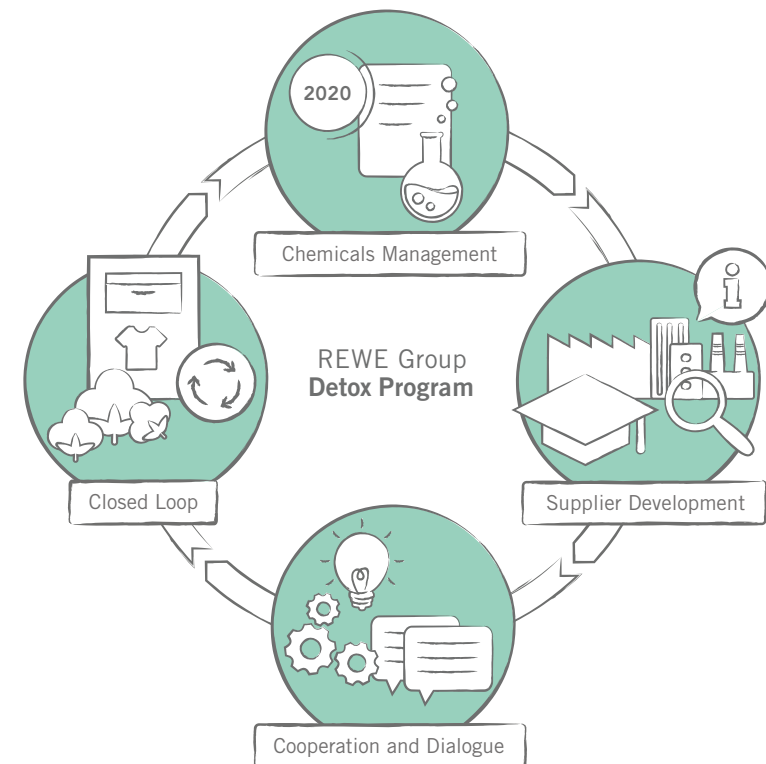


Figure 1: Graphical illustration of the REWE Group Detox Program



Chemicals management

In the Manufacturing Restricted Substances List (MRSL), REWE Group defines requirements for its suppliers with regard to the used chemicals. It contains a phase-out strategy for the gradual elimination of hazardous chemicals and defines the corresponding timelines. Since 2014, the use of 140 chemicals in the eleven priority chemical groups (APs/APEOs and PFCs, phthalates, azo dyes, organotin compounds, chlorophenols, chlorobenzene and chlorotoluenes, short-chain chlorinated paraffins as well as further individual substances) has been banned. The chemicals to be eliminated in 2019, including chlorobenzene and dyes, were identified in an extensive screening process to revise the MRSL. In addition, we carried out root cause analyses to support selected suppliers in the systematic determination of the causes of violations, which were detected in the course of wastewater tests. We also reviewed our Detox Program and checked the requirements for chemical management of various industry initiatives. We decided to use the MRSL of the “Zero Discharge of Hazardous Chemicals” (ZDHC) initiative to support standardisation in the future.

Supplier development

We are only able to achieve our goal in close cooperation with our suppliers. We want to support them in the implementation of our Detox Program through continued business relationships and at the same time commit them to pass on our requirements to their upstream suppliers – especially to upstream wet process facilities that carry out particularly water and chemical-intensive process steps, such as dyeing, bleaching or finishing. In the reporting year 2019, 21 wet process facilities participated in a training program to switch to less hazardous alternatives, which we developed together with Tchibo and the German Corporation for International Cooperation (GIZ). Thus the roll-out phase started in the reporting year. Since 2017, employees in 41 factories have been trained in the program. The 2019 program was also made accessible to other companies as part of the Partnership Initiative for Chemicals and Environmental Management of the Partnership for Sustainable Textiles. In addition, we also maintained an exchange with our strategic suppliers at meetings and discussions.

Cooperation and dialogue

In close exchange with competitors, non-governmental organisations, test institutes, service providers and universities, we develop structures and tools for a more sustainable chemicals management. As a member of the Partnership for Sustainable Textiles, REWE Group together with other companies is committed to social and ecological improvements along the textile supply chain and sets ambitious goals every year that also involve chemicals management. This also includes the training program described, which we are implementing together with the Partnership for Sustainable Textiles and other companies. We are also working on standardising the Detox requirements and advocating joint implementation in the production countries. In addition, we regularly exchange ideas with other companies and support the development of standards.

Closed loop

The approach of a closed material cycle (closed loop) takes into account the entire life cycle of textiles and focuses on the economical use of resources and sustainable consumption: Used goods are collected, some are recycled and processed into new products and sold again. This way, they are kept in a cycle. In 2019, 57 per cent of the used clothing collected by REWE Group was reused, 33 per cent was recycled and around 10 per cent was used for other purposes. In the reporting year, REWE Group expanded its range of textiles that are certified according to the Global Organic Textile Standard (GOTS). We also support the new German textile label “Grüner Knopf” (Green Button).

Milestones 2014-2020

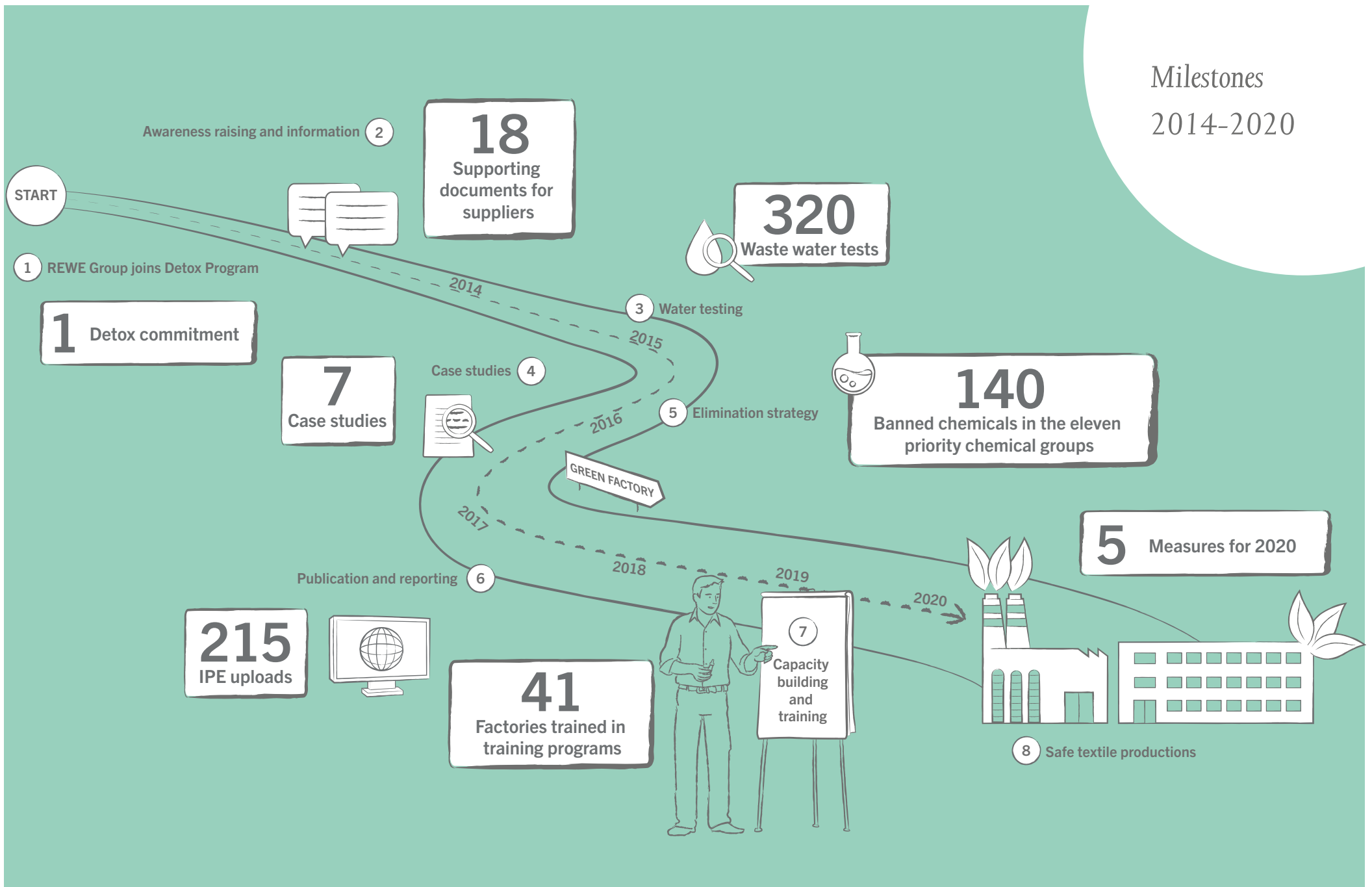


Figure 2: Overview: Milestones of REWE Group's Detox Program 2014-2020

The progress and success of REWE Group's Detox Program is based on a five-year process (December 2014 - December 2019). Below you will find an overview of the successes in each year:

2014

First discussions with suppliers and implementation partners on the elimination of hazardous chemicals from textile production. REWE Group joined the Greenpeace Detox campaign in December 2014.

2015

In a first step, REWE Group set up a roadmap according to which its hazardous chemicals are to be eliminated from the production of clothing, home textiles and shoes distributed under the private labels of REWE Group's sales lines. This included annual wastewater and sludge tests. During the first year of testing, chemical residues were detected in many wet process facilities. In order to support our suppliers and the wet process facilities in the gradual elimination of hazardous chemicals, we held a large supplier event on the Detox topic. In addition, we started first projects and organised supplier workshops on chemicals management.

2016

The first successes became evident in the 2016 wastewater tests. That year, around two thirds of the wet process facilities complied with the limit values for PFCs, APs / APEOs and phthalates, which were to be banned from production in the following years. By committing our suppliers to disclose their upstream suppliers for every purchase order, we were able to increase transparency and commitment to the Detox Program. At the same time, REWE Group integrated its Detox requirements into its supplier contracts that year and has since been checking the compliance with them in the purchasing process for each purchase order. In addition, the return system for textiles was also decided in 2016 with the aim of creating closed material cycles (closed loops).

2017

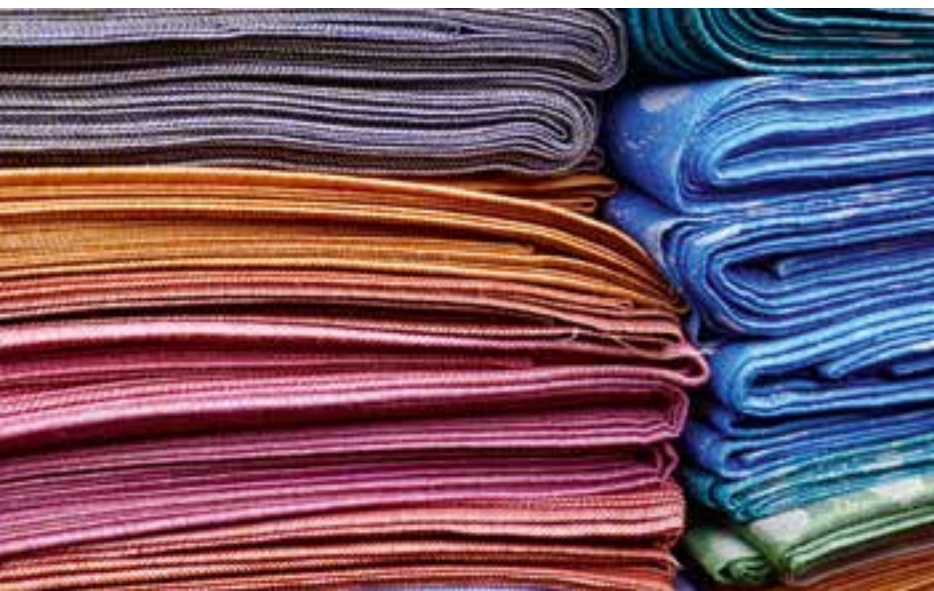
The proportion of production sites that complied with the limit values for chemicals classified as hazardous and which are to be eliminated could be further increased – individual substances were even completely eliminated. Based on the knowledge gained from five pilot projects, REWE Group together with the Gesellschaft für Internationale Zusammenarbeit (German Corporation for International Cooperation - GIZ) and Tchibo developed a training program as part of the PPP.de program initiated by the Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (German Federal Ministry for Economic Cooperation and Development – BMZ). It was presented to the first 20 suppliers and wet process facilities in China and Bangladesh. As part of the closed-loop approach, the first clothing banks were set up at PENNY locations in Germany to allow consumers to dispose of their discarded textiles.

2018

The 2018 wastewater tests showed further improvements. However, despite continuous progress, not all chemicals were completely eliminated from the wastewater as planned. It became clear that the wet process facilities need more help to change their chemicals management. This was confirmed by the experience in the training of employees in 20 wet process facilities in China and Bangladesh which led to great progress. Furthermore, the number of clothing banks was increased and the collected quantities and intended use were recorded. In 2018, also 85 per cent of the textiles within REWE Group's product range was made from more sustainable cotton. We also published the "Guideline for More Sustainable Textiles" with requirements, measures and goals for more sustainable textile production.

2019












With regard to the wastewater test results, further successes were achieved in 2019: For instance, limit values for short-chain chlorinated paraffins and organotin compounds were fully complied with. Compliance with the limit values of eight of the eleven priority chemical groups is higher than 90 per cent. Nevertheless, we see a need for further action, especially in the elimination of flame retardants and heavy metals. In order to support suppliers and production sites across the industry in the changeover to less hazardous chemicals, the training program was taken up by the Partnership for Sustainable Textiles and offered to other companies. There were 623 closing banks in 2019, 57 per cent of the textiles collected were reused and 33 per cent were recycled. We were one step closer to our goal of increasing the share of textiles made from more sustainable cotton at REWE and PENNY in Germany to 100 per cent by 2025 - in 2019 it was already 88 per cent. In addition, REWE Group has been supporting the new „Grüner Knopf“ textile label since 2019.



Overview of progress 2019

Topic	Activities	Degree of target achievement
Chemicals management		
Manufacturing Restricted Substance List (MRSL)	<ul style="list-style-type: none"> Decision to use the ZDHC-MRSL from 2020 	
Elimination of hazardous chemicals	<ul style="list-style-type: none"> Ban of organotin compounds, DMFs, nitrosamines from 2019 Phase-out of dyes, chlorobenzene and chlorotoluenes, bisphenol A and pesticides 2019 	
Waste water tests	<ul style="list-style-type: none"> Analysis of wastewater tests 2019 Cooperation with test institutes 	
Supplier development		
Transparency	<ul style="list-style-type: none"> Wet process facilities are made transparent for every order 	
Information and support	<ul style="list-style-type: none"> Supplier discussions 	
Training	<ul style="list-style-type: none"> Training of employees in 21 wet process facilities in China and Bangladesh Trainings for conducting root-cause analyses of 10 wet process facilities in India, Pakistan and Turkey Implementation of the training concept and offer of the training by the Partnership for Sustainable Textiles 	
Clean Factory approach	<ul style="list-style-type: none"> Communicating the Clean-Factory approach to suppliers Establishment of a pool of wet process factories 	

Explanation: Started Implementation in progress Completed Continued process

Topic	Activities	Degree of target achievement
Cooperation and Dialogue		
Industry initiatives	<ul style="list-style-type: none"> Membership in the Partnership for Sustainable Textiles and associated Partnership Initiative for Chemicals and Environmental Management 	
Dialogue	<ul style="list-style-type: none"> Exchange with the relevant stakeholders 	
Communicating and raising awareness	<ul style="list-style-type: none"> Report on the 2019 wastewater test results 	
	<ul style="list-style-type: none"> Publication of the wastewater test results on the IPE platform 	
	<ul style="list-style-type: none"> Support of the new textile label Grüner Knopf 	
Closed loop		
Closed loop approach	<ul style="list-style-type: none"> Optimisation projects and supplier discussions for the prevention of packaging material 	
	<ul style="list-style-type: none"> Increase of the recyclability of textile packing by foregoing high-gloss coating of paper inlays 	
Return system for textiles	<ul style="list-style-type: none"> Collection of used textiles in clothing banks 	
	<ul style="list-style-type: none"> Reporting on purposes 	
Structuring of the product range	<ul style="list-style-type: none"> Products made from recycled fibres in the product range 	
	<ul style="list-style-type: none"> CmiA-certified work wear at REWE and toom Baumarkt DIY stores 	

Explanation:  Started  Implementation in progress  Completed  Continued process

Table 1: Overview of progress made by the REWE Group

III. ACTIONS AND PROGRESS IN DETAIL

As part of our activities in the fields of chemicals management, supplier management, cooperation and dialogue as well as closed loop, we implement comprehensive measures every year and present our developments in annual progress reports. In the present report, we also illustrate the overall progress that REWE Group has achieved since the start of its Detox Program in 2014.

3.1 Chemicals management

The objective of our chemicals management is to identify undesired chemicals used in textile production and to develop substitution strategies to eliminate them from the production process. By complying with the precautionary principle, REWE Group ensures that chemicals with potentially hazardous properties are not used in production as a precaution and are instead replaced, even if their harmful properties have not yet been clearly proven. In our Manufacturing Restricted Substances List (MRSL), we document all chemicals that we have classified as hazardous and may therefore not be used in our supply chains. In addition to the eleven chemical groups defined and prioritised in the Detox Commitment, REWE Group's MRSL also comprises five further groups of substances which must be eliminated from production. The MRSL defines test methods and limit values that apply to the use of the listed chemicals and the presence of these chemicals in wastewater and sewage sludge.

The Restricted Substances List (RSL), which is included in the MRSL, also defines limit values for chemical residues in our finished products. The MRSL also contains specific information for all chemicals as to when elimination is to take place and is updated annually. Our MRSL 4.0 which was valid until the end of 2019 will be replaced in 2020 by the MRSL issued by the ZDHC initiative.

With regard to limit values for wastewater and also for the products of our suppliers, we will follow the ZDHC standard in the future. Until now, the production facilities often had to meet different company requirements with regard to the use of chemicals and the associated limit values. By using the ZDHC-MRSL, we support our suppliers in being able to better implement the requirements. REWE Group is thus driving the formation of an industry standard and, at the same time, can cooperate more efficiently with the initiative on implementing its own Detox Program.

Existing and future requirements by the MRSL

In 2018, the previous MRSL 4.0 was updated according to the defined, systematic [MRSL Update Method of REWE Group](#). The existing limit values were reviewed in collaboration with testing institutes and, where necessary, were changed in line with the best available technology. At the same time, an analysis was carried out to determine whether other chemicals should be classified as hazardous. The [MRSL 4.0](#) is currently available on REWE Group's website until it is officially replaced by the MRSL of the ZDHC initiative in 2020.

Further development of the Detox Program - Change over to the MRSL of the ZDHC initiative

As part of the revision of our Detox Program, we decided to use the MRSL of the "Zero Discharge of Hazardous Chemicals" (ZDHC) initiative as of 2020. In this way, we aim to support the standardisation of Detox requirements for wastewater and product tests. At the same time, we make our suppliers' processes easier, as they will no longer have to meet different requirements. The changeover is associated with new, stricter requirements for the protection of people and the environment. For example, the wet process facilities must always be able to provide a valid wastewater test result, provide a chemical inventory and must take part in trainings regularly.

The process requires REWE Group to source its products from a pool of wet process facilities that meet the new requirements. REWE Group will continue to closely monitor the ZDHC standard and will commit to the further development in accordance with the Detox requirements.

Continuation of the phase-out strategy

In order to enable a gradual elimination of hazardous chemicals in the supply chain, we have defined individual timelines for each chemical in our MRSL. These provide our suppliers with information as to when they have to eliminate the substances from production. They are based on REWE Group's phase-out strategy, which was continued in the reporting year:

Since 1 January 2019, the use of phthalates and organotin compounds which belong to the priority chemical groups has been banned in the production of clothing. Nitrosamines and dimethylformamide (DMF) may also no longer be used from this date. In 2019, the chemical groups chlorobenzene and chlorotoluenes, pesticides and dyes were in phase-out in addition to the chemicals 2-ethoxyethyl acetate, chromium(III) and bisphenol A. Since the end of 2019, these chemicals have been banned. Since then, the use of phthalates, organotin compounds and short-chain chlorinated paraffins has been banned not only in the production of clothing, but also in the manufacture of home textiles and shoes.

Our suppliers received information on the timelines of the new phase-outs at the beginning of 2019. This gave them sufficient time to prepare for the ban.



Left: Undyed fabrics are transferred to the dyeing process

Right: Wet dyed fabrics are removed from the machine

Pilot projects

Various pilot projects enable REWE Group to gain insights into the implementation of the Detox Program and into possible challenges, problems and solutions. Six pilot projects focusing on improving chemicals management within the factories in various production countries have already been completed. The procedure as well as the results of the [case studies can be accessed at the REWE Group website](#).

We have carried out and completed a pilot project for root cause analysis in ten factories in India, Pakistan and Turkey. The causes of violations were systematically determined using wastewater tests. As part of the root cause analysis, violations detected in wastewater with regard to antimony, zinc and other heavy metals and phthalates were investigated. Fabric was identified as the cause of antimony, as the latter is used as a catalyst in polyester production. For zinc, the cause was the printing process, and for heavy metals, it was mainly in the inlet water. The presence of phthalates could be traced back to dyes that were used in the premises.

This fact illustrates the need to consider not only the chemicals used in production, but also all other possible sources of hazardous chemicals.

Pilot project: Elimination of APEOs

As part of our pilot project to eliminate APEOs, we identified purchased raw fabrics, chemicals used for printing, and contract work with supplied raw materials and auxiliary materials as possible causes for the presence of APEOs as early as in 2018. The raw fabric was checked in the reporting year, and on this basis, one chemical was banned. The substances used in the printing process were checked as well. However, these revealed only a very low risk for the presence of APEOs. Contract work will no longer be carried out in the future. A wastewater test after the implementation of the above-mentioned measures showed no further findings.

Case studies:

Pilot projects	Term
Pilot project with a clothing manufacturer, Bangladesh	February to June 2015
Pilot project for PFC substitution, Bangladesh	March to June 2016
Pilot project for the STeP certification of OEKO-TEX, China	February 2015 to November 2016
Pilot project to optimise bleaching processes, Bangladesh	June to November 2016
Pilot project for chemicals management, China	May 2015 to December 2016
Pilot project for the elimination of APEOs, China	July 2017 to April 2019

Case studies to the pilot projects are available for [download](#).

Table 2: Pilot projects of the REWE Group



Data on wastewater quality:

In order to ensure compliance with the Detox requirements, REWE Group commits its suppliers to submitting a valid wastewater test. As part of the Detox Commitment, the data has been published annually in the Detox progress report as well as on the portal of the [Institute for Public and Environmental Affairs \(IPE\)](#) since 2015. In the future, we will illustrate the progress of our Detox Program in the [REWE Group Sustainability Report](#).

Process and methodology

Together with selected testing institutes, REWE Group regularly checks the wastewater of the wet process facilities in the textile supply chain of its private labels for hazardous chemicals. A valid wastewater test from an accredited laboratory must be submitted for every order. The following analysis includes all wastewater reports that took place in 2019 in the wet process facilities with which we have supplier relations. REWE Group analyses all wastewater tests with view to the eleven priority chemical groups in order to evaluate the progress made in implementing the Detox Commitment. At the same time, the tests allow conclusions to be drawn about the chemicals management of the respective factories. On the basis of these findings, we can work together with the production facilities on improvement measures and substitution possibilities with the aim of continuously reducing wastewater contamination.

The wastewater from production facilities in nine countries (Bangladesh, China, Egypt, India, Pakistan, Italy, Poland, Turkey, and Vietnam) was tested for hazardous substances. The majority of the wet process facilities of REWE Group suppliers are located in China. In the reporting year, 46 per cent of the wastewater tests were carried out at Chinese production facilities. 34 per cent of the test results come from factories in South and Southeast Asia and 22 per cent from production facilities in Europe, Egypt and Turkey (Figure 3).

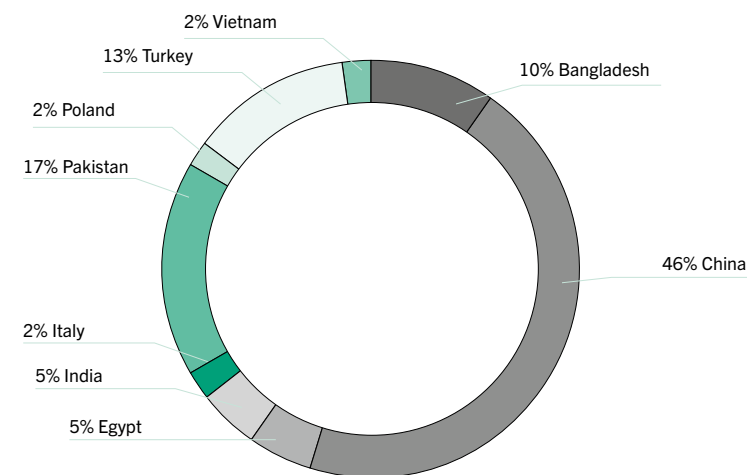


Figure 3: Geographic distribution of investigated wet process facilities¹

Year-on-year comparison of the test results

The parameters of the wastewater tests are subject to the phase-out timelines and bans outlined in the MRSL. In 2019, the group of amines, which includes various carcinogenic dyes, went into phase-out in addition to the two chemicals 2-ethoxyethyl acetate and chromium(III). The use of these chemicals has no longer been allowed since 1 January 2020. This likewise applies to the use of pesticides, bisphenol A as well as chlorobenzene and chlorotoluenes. Phthalates, organotin compounds, nitrosamines and dimethylformamide (DMF) had not been used in the production of clothing since the beginning of 2019 and had to be eliminated from production of home textiles and shoes by the end of 2019.

¹ Fig. 3: Due to rounding effects, the number of the production facilities does not add up to 100 per cent.

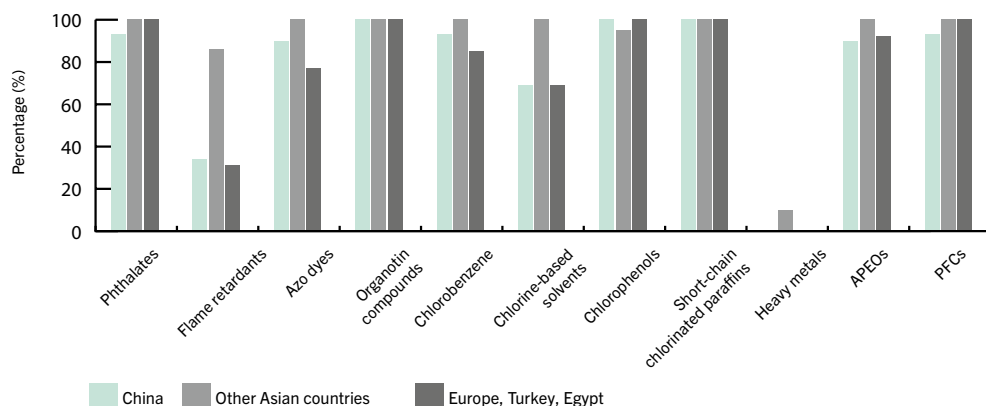


Figure 4: Compliance with the limit values for the eleven priority chemical groups as a percentage of wet process facilities 2019 (country comparison)

Test results in country comparison

The production facilities in South and Southeast Asia as well as in Europe have been able to completely eliminate PFCs from their production processes. In China, more than 90 per cent of the production facilities comply with the limit values for PFCs. Furthermore, all inspected facilities were able to completely eliminate short-chain chlorinated paraffins. Chlorophenols were completely eliminated both in China and in the investigated production facilities in Europe (including Egypt and Turkey). In South and Southeast Asia, no chlorophenols were detected in 95 per cent of the tests. Furthermore, particularly major differences are apparent regarding flame retardants, which have been banned or in phase-out since 2018: No flame retardants were detected in 34 per cent of the wastewater tests at Chinese production facilities and in 31 per cent of the factories in Europe (including Egypt and Turkey). In South and Southeast Asia, the proportion was already over 80 per cent (Figure 5).

Despite noticeable improvements, elimination of hazardous chemicals is least advanced in China. Therefore, REWE Group sets a clear focus on this region with its training program for suppliers and their wet process facilities.

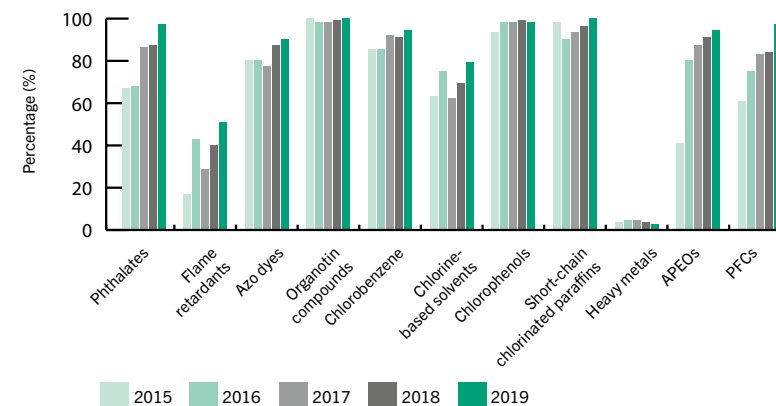


Figure 5: Compliance with the limit values for the eleven priority chemical groups as a percentage of wet process facilities

APs/APEOs and PFCs

According to our MRSL, APs/APEOs and PFCs have been banned since 2017, but the substances have still been detected in the wastewater tests. If violations are detected, a plan of action is drawn up together with the affected supplier and a new wastewater test is carried out after a reasonable period of time. Since the start of the phase-out in early 2016, the factories have increasingly taken measures to eliminate the substances from their production. The wastewater tests have shown significant improvements since the start of the Detox program (Figure 4): In 2016, the proportion of production facilities that complied with the limit values in wastewater was 44 per cent for APs / APEOs and 62 per cent for PFCs. Since then, this proportion has increased steadily. In 2018, 91 per cent of the production sites already complied with the limit values for APs/APEOs, in 2019 it was 94 per cent. Compliance with the limit values for PFCs increased to 84 per cent in 2018 and further to 97 per cent in 2019. Within the scope of supplier development, REWE Group is continuously working towards substituting APs/APEOs and PFCs in the production processes and improving wastewater quality.

Flame retardants, short-chain chlorinated paraffins, chlorophenols and chromium(VI)

The wastewater tests revealed that the pollution of the wastewater with the substances that have been banned since 2018 could be reduced. In 2019, the limit values for short-chain chlorinated paraffins (SCCPs) could be complied with in full (2018: 96 per cent). Chlorophenols could not be detected in 98 per cent of the cases. The proportion of production facilities that comply with the limit values for flame retardants rose to 51 per cent (2018: 40 per cent). The individual substance chromium(VI) has already been completely eliminated in 2017.

Phthalates, chlorobenzenes and organotin compounds

According to the REWE Group MRSL, phthalates and organotin compounds have been banned in the production of clothing since 1 January 2019. The proportion of production facilities that complied with the limit values for phthalates increased from 87 per cent in 2018 to 97 per cent in 2019. For organotin compounds, all wastewater test reports meet the limits. In the previous year, 94 per cent of the factories complied with the limit values for chlorobenzene (Figure 4). Since 1 January 2020, the use of phthalates and organotin compounds has also been banned in the production of home textiles and shoes.

In principle, it should be noted that the year-on-year information provided does not refer to the same population of wet process facilities, since the suppliers may change their upstream suppliers.

Challenges

The results of the 2019 wastewater tests showed again that there have been noticeable improvements. The elimination of chemicals from the entire factory is particularly challenging because, in addition to REWE Group, other companies have their textiles produced there and often do not have the same chemicals management standards. Furthermore, there is an increased need for action for certain chemicals. Elimination of flame retardants (especially boron and antimony) is particularly complex. In many cases, antimony contamination results from upstream polyester production. In addition, flame retardants are often contained in detergents where switching to alternatives is difficult. There is some improvement in most cases but it still does not suffice. In China in particular, complementary measures are required. Although APs/APEOs and PFCs have been banned since 2017, they are still detected in a few cases – albeit in small quantities. The elimination of heavy metals is also particularly complicated, because in many cases the input

water used for production is already polluted by these substances. REWE Group will continue to carry out some educational work in this area and help the wet process facilities develop a comprehensive chemicals management system and an improved water treatment.

In order to ensure compliance with our Detox requirements,

100%

of our suppliers are regularly monitored.



A water treatment plant in Shenzhen, China

3.2 Supplier development

Chemicals are generally not used by the direct business partners of REWE Group, but by their upstream suppliers. Therefore, the entire supply chain must be taken into account to ensure the success of the Detox Program. The aim of supplier management is therefore to maintain close relationships with our suppliers and raise their awareness for the Detox Program. We will only be able to achieve our goals and ensure the use of more environmentally friendly chemicals through continuous knowledge transfer, consultation and cooperative partnership with our suppliers and factories. In order to ensure compliance with our Detox requirements, 100 per cent of our suppliers are regularly monitored. In the future, only factories with a valid wastewater test, a chemical inventory and that have participated in training will be considered for cooperation. The additional requirement to participate in training results from the recognition that the support and development of wet process facilities is an essential success factor for the achievement of objectives.

Information and support

We notify our suppliers in good time about any changes in requirements and the timelines to provide them with optimum support in the substitution of hazardous chemicals. We therefore notified our suppliers in writing about the MRSL update at the beginning of the 2019 reporting year. They were also informed about the future use of the ZDHC-MRSL in February 2020. We also actively support our suppliers in the implementation of the Detox targets. This includes, for example, support in compiling chemical inventories for which we make a template available to our suppliers. A supplier manual provides our business partners with the most important information and requirements. The trainings also aim to support our suppliers and their wet process facilities in the implementation.

Clean Factory approach

With the Clean Factory approach, we ensure that the factory completely dispenses with hazardous chemicals — and not only for the products commissioned by REWE Group. REWE Group is currently building a pool of wet process facilities that meet basic environmental standards and switch their processes to non-hazardous chemicals. We have revised the requirements for the pool in 2019 and made them stricter. As of 2020, only factories and their wet process facilities with a valid wastewater test that provide a chemical inventory and have participated in training will be considered for cooperation. REWE Group reserves the right to exclude existing factories from the pool if the above-mentioned criteria are no longer met. With this step, REWE Group's Detox process enters a new phase.



Group work during a workshop with participants in China.

Training

With our training program we inform the wet process facilities about necessary changes in their chemicals management and support them in the switch to less hazardous alternatives. With the trainings, we make a contribution to our Clean Factory approach: Our goal is to build a pool of factories that meet our Detox requirements. Local experts train the relevant employees in the factories. As part of this, they regularly visit wet process facilities, advise the employees and conduct workshops. Our partner Sustainable Textile Solutions, who trained the trainers before the start of the program, also provided advice in 2019 and was responsible for the quality assurance. With this approach, we want to ensure that competencies are developed locally and within the production facilities. Together with the German Corporation for International Cooperation (GIZ) and Tchibo, we developed the training program as part of the PPP.de program initiated by the German Federal Ministry for Economic Cooperation and Development (BMZ).

In 2019, 21 wet process facilities in China and Bangladesh participated in this program. During three on-site visits and four workshop days, their employees were trained and worked with the trainers on management action plans to improve their chemicals management.



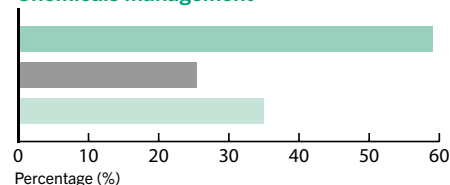
Workshop on chemicals management in China

The impact was determined by a scorecard at the end of the program. This comprises a differentiated catalogue of criteria that reflects the five areas of chemicals management, management systems, process optimisation, wastewater and waste management as well as water consumption. Through their participation, the production facilities of REWE Group were able to increase their performance in these areas by an average of 19 per cent. The greatest impact was achieved in the areas of chemicals management (35 per cent) and management systems (32 per cent). Detailed results regarding the performance of the factories in the supply chain of REWE group are shown in Figure 6.

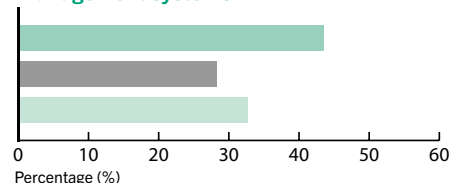
In Bangladesh, production facilities were mostly aware of the need for change as was demonstrated by their willingness to cooperate and their active participation in the trainings. Bangladesh was able to achieve significant improvements, particularly in chemicals management. The average percentage improvements in Bangladesh was around 42 per cent, although the number of participating factories was considerably lower than in China.

In China, intensive involvement of all participants is still necessary to create awareness of the added value of the training program and the changes to be achieved. In 2019, two production sites of our supply chain left the program because they could not meet the high requirements. As a result, they will no longer produce for REWE Group in the future. The remaining production sites were able to achieve improvements, especially in management systems and chemicals management. One Chinese factory was able to achieve above-average progress due to the high level of commitment of the responsible persons. The average improvement at the production facilities in China was 20 per cent.

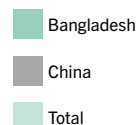
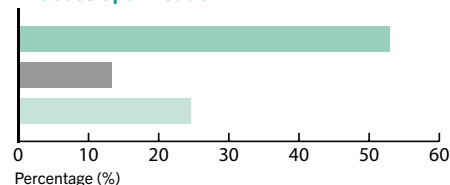
Chemicals management



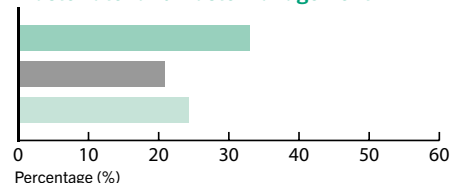
Management systems



Process optimisation



Wastewater and waste management



Water consumption

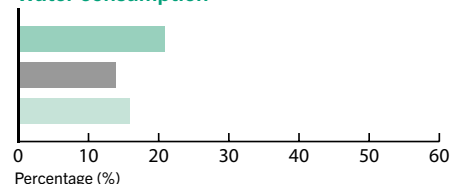


Figure 6: Average percentage improvements of facilities achieved in the supply chain of REWE Group through trainings in 2019

In addition to the work at the production facilities, the training program in 2019 focused on the cooperation with local universities and training institutions with the aim of further strengthening local solution competence in the long term.

In 2019, we also expanded our cooperation with the partners of the Partnership for Sustainable Textiles. The training program developed with Tchibo and the German Corporation for International Cooperation (GIZ) was taken up by the Partnership for Sustainable Textiles and offered to other companies. For all those involved, this is a milestone on the way to establishing joint training structures for chemicals management: The cooperation with other companies is effective because all other cooperation partners have similar requirements. In this way, costs and training structures can be shared and thus an efficient process can be realised. In 2019, intensive work was carried out to develop a structure for fostering the trainings with the aim of establishing them in the long term. We hope that this will lead to increased participation by other companies. In the future, the service provider Systain will be responsible for the project management of the trainings and will assign local trainers who meet certain quality requirements. Wherever possible, trainers trained in the program by REWE Group, Tchibo and the German Corporation for International Cooperation (GIZ) should be selected.

Transparency and communication

To ensure the implementation of our Detox Program on site, we regularly discuss requirements, challenges and measures with purchasers in Germany and Asia. Creating transparency, both at our direct business partners and at our wet process facilities, is particularly important to us and we support them in eliminating hazardous chemicals and switching to alternatives. For each order, we collect information about the wet process facilities and require them to publish their data on the wastewater tests carried out on the platform of the Institute for Public and Environmental Affairs (IPE).

Interview with a training participant

Modele De Capital Ind. Ltd is a long-standing supplier of REWE Group. The company produces knitwear such as t-shirts, trousers, dresses and jackets in Bangladesh. Shubhra Chanda, who is responsible for sustainability, is in charge of chemicals and environmental management at Modele.

Mr Chanda, together with REWE Group you are working on a safe and environmentally friendly chemicals management. How did this come about?

Shubhra Chanda: When REWE Group informed us about its Detox Program in 2015, chemicals management was a new concept to us. At the beginning, we did not know what consequences this would have for our company. But as we strive to act sustainably and to develop further, we participated in a REWE Group pilot project in 2016. We realised that good environmental and chemicals management is the key to sustainable business practices and that this is something our customers are increasingly demanding from us. We have thus begun to improve our chemicals management together with REWE Group.

The step towards sustainable chemicals management involves many changes. What were the greatest challenges and how did you face them?

Shubhra Chanda: At the beginning, our employees were not familiar with the concept of chemicals management and had limited knowledge. This is why we conducted internal trainings for our employees, for example on chemical safety. We especially focused on the specifications and recommendations

of the ZDHC. Moreover, a wastewater test revealed that a dye we use does not comply with the limit values. The search for more environmentally friendly alternatives was difficult – we had to perform many different tests. In the end, we found an alternative dye that had a similar shade to the original. One testing institute confirmed that it was below the permissible limit values. In

We realised that good environmental and chemicals management is the key to sustainable business practices and that this is something our customers are increasingly demanding from us.

total, it took almost half a year before we could use this more environmentally friendly alternative. We then held internal trainings on the procurement of safe chemicals.

REWE Group offers trainings on chemicals management. What did you learn from the training?

Shubhra Chanda: The key message for us was: We need to have an active chemicals management. During the trainings we learned how to implement this. We then introduced new guidelines and processes and prepared the necessary documents such as a process flowchart for chemicals and a wastewater policy. In addition, after the trainings, we made sure to obtain safety data sheets of the chemical products, because we need them in order to carry out a proper risk assessment. All the measures taken from the trainings helped us to ensure the use of RSL-compliant substances while reducing hazardous chemicals to a minimum. In the end, the training helped us to remain competitive on the global markets.

What actions are you planning to take in the future in order to further improve chemicals management in your factory?

Shubhra Chanda: We are currently using an automatic dosing system only for liquid chemicals – solids are still manually dosed. Therefore, we are planning to introduce a fully automatic dosing system for all chemicals. Contamination and chemical waste can be prevented by more precise handling of the chemicals. Moreover, we will install an exhaust system in our chemical storage in order to ensure optimised protection of our employees' health. Our long-term goal is to replace hazardous chemicals by safe alternatives and to improve our waste management system.

The key message for us was: We need to have an active chemicals management. During the trainings we learned how to implement this.



3.3 Cooperation and dialogue

The implementation of pilot projects, experience on site as well as discussions and cooperation with our suppliers provide us with valuable insights into the implementation of the requirements and the challenges that arise. In this context, we contribute to the development of tools and standards and engage in industry-wide exchange. Cooperation in initiatives and alliances is particularly conducive to exploiting synergies, sharing experience, developing uniform requirements and thus jointly improving conditions in the textile supply chain.

Industry initiatives

As a member of the Partnership for Sustainable Textiles, we work together with many other companies to improve social and ecological standards along the textile supply chains.

Within the Partnership, we are active in the Partnership Initiative for Environmental and Chemicals Management. In the future, we will conduct trainings in wet process factories together with the consulting company Systain to improve the chemicals management on site (see section [Training under 3.2 Supplier management](#)). We have also contributed to the concept and the production of training videos in different languages, which were made available to our suppliers in 2019.

The life cycle of a piece of clothing

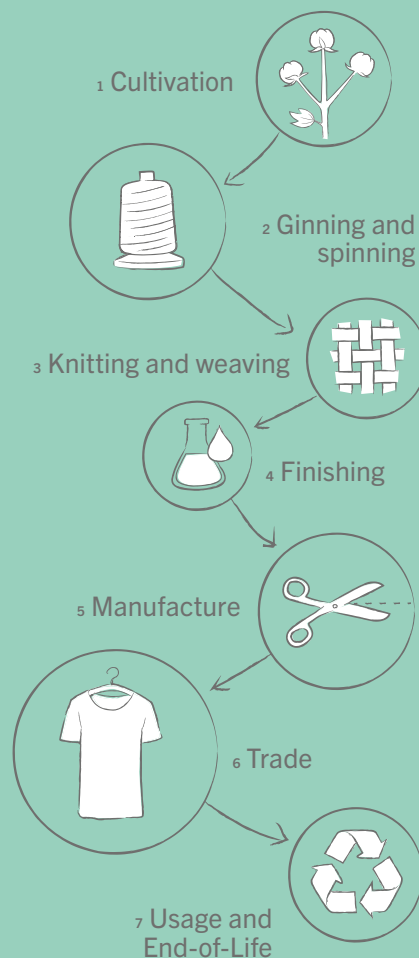


Figure 7: The life cycle of a piece of clothing

As a member of the Partnership, we set ourselves ambitious goals every year and commit ourselves to reporting on progress, including on chemicals management, on a regular basis. This [roadmap](#) is published annually on the website of the Partnership for Sustainable Textiles.

In addition to the Partnership for Sustainable Textiles, REWE Group is also a member of the “Chemicals in Textile and Footwear” working group of amfori’s Business Environmental Performance Initiative (BEPI). A cooperation between the Bangladesh University of Textiles and the German Corporation for International Cooperation (GIZ) agreed in the reporting year is intended to ensure continued training and further education of experts for chemicals management. We have launched a similar cooperation in China. An initial training on chemicals management has already been conducted at the Shanghai Donghua University in 2019. The students who took part were also given the opportunity to tour a factory in order to gain practical experience.

Dialogue

We are in continuous dialogue with our stakeholders and discuss with them the Detox requirements and the challenges that have to be overcome on the way to a textile production that is free of hazardous chemicals. Dialogue is helpful not only with our suppliers and business partners but also, and in particular, with other companies, who are also working to ban harmful chemicals from their supply chains. Together, we continue to develop standards and a sustainable chemicals management. In addition, the exchange with service providers, test institutes and research institutes is vital.

Communicating and raising awareness

We communicate our developments, processes and measures regarding our Detox Program in our annual Progress Report. In addition, the REWE Group Sustainability Report, which is also published annually, contains further information on the Detox Program. The "[Guideline for more Sustainable Textiles](#)" of REWE Group outlines our approach to more sustainable textiles and serves to raise awareness of suppliers and partners in the supply chain for sustainable textile production and to present requirements and targets in a transparent manner. To help our suppliers to meet our requirements for chemicals management in textile production we provide them with a supplier handbook containing important information and factsheets on the priority chemical groups which provide background information, illustrate risks and outline possible alternatives. We also held regular talks with our suppliers in 2019 to discuss their concerns, questions and goals. Training videos provide factory employees with additional multimedia support to help them improve their chemicals management.

In order to inform our customers about our commitment to more sustainable textile production, we use our own channels such as flyers, Facebook or the in-store radio. For instance, we already published reports on the Partnership for Sustainable Textiles and our Detox targets. In addition, the focus in 2019 was on customer information on GOTS and Cotton Made in Africa-certified textiles, as REWE Group aims to only purchase textiles made from more sustainable cotton by 2025. REWE Group also published reports on the introduction of the new textile label Grüner Knopf. The new label marks textiles that have been produced under consideration of social and ecological aspects and is supported by REWE Group.

The [video explaining the Detox Program](#) illustrates the problems of hazardous chemicals in the production of textiles and presents REWE Group's solutions.

Interview with the Partnership for Sustainable Textiles



The Partnership for Sustainable Textiles was founded in 2014 on the initiative of the German Minister for Economic Cooperation and Development in response to the fatal accidents in textile factories in Bangladesh and Pakistan. The multi-stakeholder partnership comprises members from the industry (companies and associations), non-governmental organisations, trade unions, standards organisations and the German Federal government. Since the end of 2017, Rahel Lemke has been overseeing the associated partnership initiative for Chemicals and Environmental Management. The aim of the initiative is to replace hazardous chemicals at the production site by harmless chemicals or to significantly reduce their use.

Ms Lemke, the Partnership for Sustainable Textiles has been in existence since 2014. What does the partnership do to reduce the use of hazardous chemicals?

Rahel Lemke: The use of hazardous chemicals and the associated impacts on people and the environment constitute a major problem in the textile industry. The approximately 120 members of the Partnership for Sustainable Textiles face similar challenges, which means that teaming up on this issue clearly results in added value. In the partnership, we therefore work together to identify risks in the production areas and to develop and implement instruments to mitigate them. With regard to the chemicals and environmental management, a special partnership initiative has defined three areas of collaboration of the member organisations: first, raising awareness for and education on responsible environmental and chemicals management in the industry

The approximately 120 members of the Partnership for Sustainable Textiles face similar challenges, which means that teaming up on this issue clearly results in added value.

at the production facilities, second, the implementation of trainings for production facilities, and third, the elimination and substitution of chemicals that are hazardous for the environment. Here, we work closely with the ZDHC initiative.

Each textile company could also become active on its own. How, in your opinion, do the members benefit from their engagement in the partnership initiative?

Rahel Lemke: Factories often produce for several textile companies, therefore all of them will finally benefit from improvements in chemicals management. The topic is very complex, and there are major challenges along the diversified international supply chains. The partnership allows the members to exchange experiences and to work together on solutions. In recent years, the awareness for the relevance of environmental standards has increased. The use of hazardous chemicals has already been significantly reduced in some cases. The current challenge is the comprehensive implementation of sustainability requirements – a process that can only take place in close cooperation with the local producers.

The partnership and its members actively support the production facilities with trainings. How did this come about?

Rahel Lemke: The textile and fashion companies in the partnership want to actively support their production facilities in the improvement steps. Together, they developed training videos and training materials and tested them in selected wet process facilities. REWE Group played a leading role in the strategy and development of the training.

Since 2020, the training programs have also been made available to non-partnership members, which marks an important step: This enables the entire industry to actively contribute to better chemical management at their suppliers.

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What feedback do you receive from the production facilities on the trainings?

Rahel Lemke: The trainings are well accepted, especially when there is a good and intensive communication between the partnership members and the production facilities right from the start. Of course, there are cases when production facilities left the program. We try to prevent this by providing the production facilities with insights into the program beforehand and by explaining what they can expect and how they can benefit from the trainings.

The expansion of the training will continue to be an important task for the members of the partnership. What other topics are next on your agenda?

Rahel Lemke: We will expand and continuously improve our training programs. In addition, we are planning to make our offer available in other countries and in cooperation with partners. Different legal frameworks in the individual countries are a major challenge for global, environmentally friendly chemicals management. Even where laws exist, enforcement is often lacking. Therefore, we joined forces with international initiatives such as the ZDHC or the Sustainable Apparel Coalition (SAC). In 2020, our main concern in the environmental sector is the substitution with environmentally friendly chemicals as well as wastewater treatment, closed-loop economy, climate protection and sustainable fibres.

3.4 Closed loop

Keeping materials in circulation and thus conserving resources and promoting sustainable consumption – this is the goal pursued by the closed-loop approach. To this end, REWE Group wants to offer more sustainable products and environmentally friendly packaging and contribute to the recycling of discarded textiles. Reporting provides information not only on the number of clothing banks, but also on quantities and uses.

Packaging

For REWE Group, the closed-loop economy is key to conserving resources and recycling raw materials.

Since packaging consumes a considerable amount of resources, REWE Group starts here and has developed a comprehensive approach for more eco-friendly packaging.

REWE Group worked closely with key stakeholders – from purchasing departments and selected NGOs to experts in packaging design. The approach was developed on the basis of a data analysis to identify significant impacts and levers. Through a detailed analysis of all packaging data, REWE Group identified both major suppliers and major packaging fractions in 2018. Building on this, the company initiated optimisation projects and supplier discussions in all product areas with the aim of avoiding, reducing and improving packaging materials with a view to eco-friendliness. Subsequently, the approach was fleshed out by objectives and measures. High-gloss coating of the paper inlays for textiles will be dispensed with in the future in order to increase recyclability.

Returning textiles

REWE Group already established a return system for textiles in 2016 and, together with a service provider, set up the first donation banks at locations of our PENNY sales line in 2017. In this way, we want to ensure that textiles are recycled and not disposed of. By the end of 2019, a total of 623 clothing banks were available for the collection of discarded textiles. The collected textiles find use as second-hand clothes or are recycled in the industry or used as input material in textile production. Textiles that can no longer be recycled are professionally disposed of. The rental income goes into social projects, such as the PENNY Förderkorb, with which PENNY supports social commitment. Data on collected quantities and intended use is accumulated annually by our cooperation partner:

Intended use	2018 in %	2019 in %
Reuse	58	57
Recycling	31	33
Other recovery	11	10
Total	100	100

Table 3: Overview of fractions of the clothes donation banks

Structuring of the product range

As a way of using textiles longer, our range includes textile products made from recycled fibres, such as socks made from 65 per cent recycled cotton that meet the OEKO-TEX Standard 100. REWE Group is striving to expand its range of more sustainable cotton textiles: By 2025, we want to increase the proportion of textiles made from more sustainable cotton at REWE and PENNY in Germany to 100 per cent. In 2019, we were able to increase the proportion to over 88 per cent. In the reporting year, we particularly expanded our range of textiles that are certified according to the Global Organic Textile Standard (GOTS). In addition, we also rely on Cotton made in Africa (CmiA) and on recycled cotton. Our employees in the REWE stores and in all toom DIY stores will in future only be wearing workwear that has been certified by CmiA. In some stores, the changeover has already taken place in 2019 and is planned to be continued in the upcoming years.

REWE Group promotes the Grüner Knopf label to provide our consumers with guidance when purchasing more sustainable textiles. The state-owned textile label introduced in 2019 is intended to ensure compliance with ecological and social standards. At REWE Group, the cotton bag (REWE and PENNY), the reusable net bags (PENNY) as well as clothing and home textiles (REWE) are currently awarded the Grüner Knopf label.



REWE Group receives the accolade for the first products to be awarded the Grüner Knopf label

The Grüner Knopf label

The Grüner Knopf (Green Button) is a state-owned label of the German Federal Ministry for Economic Cooperation and Development for the certification of socially and ecologically sustainable textiles. It sets binding requirements to protect people and the environment. A total of 46 demanding social and environmental standards must be complied with – including waste water limit values. The award of the label is subject to a prior comprehensive company review before independent inspectors check compliance with the set criteria. The Grüner Knopf label offers consumers reliable guidance when shopping, is attached directly to the product and is therefore easy to find. As of mid-2020, the Grüner Knopf label will mark textiles in around 5,800 REWE and PENNY stores throughout Germany, whose production facilities have been checked with regard to social and environmental criteria.

WIR FÜHREN PRODUKTE MIT DEM SIEGEL:

**GRÜNER
KNOPF**
SOZIAL. ÖKOLOGISCH. STAATLICH.
UNABHÄNGIG ZERTIFIZIERT.

IV. OUTLOOK AND NEXT STEPS

2020 marks an important milestone for REWE GROUP in the elimination of hazardous chemicals – we have revised our Detox process and will advance the elimination of hazardous chemicals from textile supply chains. The focus will be on the following measures:

- REWE Group will introduce a new Detox process in 2020. It will follow the ZDHC standard and comprise new, stricter requirements for wet process facilities (see section [3.1. Chemicals management](#)).
- We will conduct our trainings in 2020 in a new anchoring structure together with the Partnership for Sustainable Textiles. For this purpose, the trainings are offered by the service provider Systain as central organisational point thus ensuring that they will be available to all members of the Partnership for Sustainable Textiles and other companies in the future.
- We will continue our close cooperation with the Partnership for Sustainable Textiles and the ZDHC initiative to promote standardisation and to make further progress in the elimination of hazardous chemicals. Together with the Partnership for Sustainable Textiles, we aim to foster the trainings and guidance on the chemical inventory.
- In 2020, the focus of the collaboration with ZDHC will be on the introduction and review of the new MRSL.
- In our sustainability report, we will continue to provide information on our Detox process, successes and current challenges.

Disclaimer

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The dialogue on the Detox Program is of great importance to us. Please contact us with suggestions and questions at: nachhaltigkeit@rewe-group.com

www.rewe-group.com

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