

Chemical Management at Tesco F&F clothing – our Detox progress.

August 2021 update



Introduction.

At F&F, we are committed to offering our customers great quality affordable fashion as well as reducing our environmental impact. We continue to strive for new ways to accelerate our efforts, even in challenging times. Although COVID-19 has added complexity to some of our programmes and has adversely impacted many of the Asian countries where major textile and clothing production hubs are located, we continue to adjust and adapt the way we work to manage our supply chains whilst maintaining our standards and achieving important targets. We know that by making the right decisions to source our products responsibly and ethically we can make positive steps towards reducing our environmental impact. This in turn will continue to build trust with customers while protecting our communities and the planet.

In 2020, our partnership with WWF helped us launch the F&F children's clothing range, made from 100% cotton. Designs incorporated wildlife images, with facts included on labels. The initiative aimed to raise awareness and funds to help address important sustainability challenges. For every item sold F&F has donated 5% of sales to WWF, resulting in a £200,000 donation in 2020/21.

In 2020/21, we have continued to strengthen our systematic approach to chemical management through three key areas:

- 1.** Continue to focus on input chemistry and expand our work with all three Zero Discharge and Hazardous Chemicals (ZDHC) accredited management platforms to manage the chemical inventory of our mills, moving towards the use of safer alternatives and more sustainable chemistry.
- 2.** Strengthen supplier relationships with capacity building and empowerment to improve performance and transparency.
- 3.** Expand our engagement with industry sector initiatives to drive best practice.

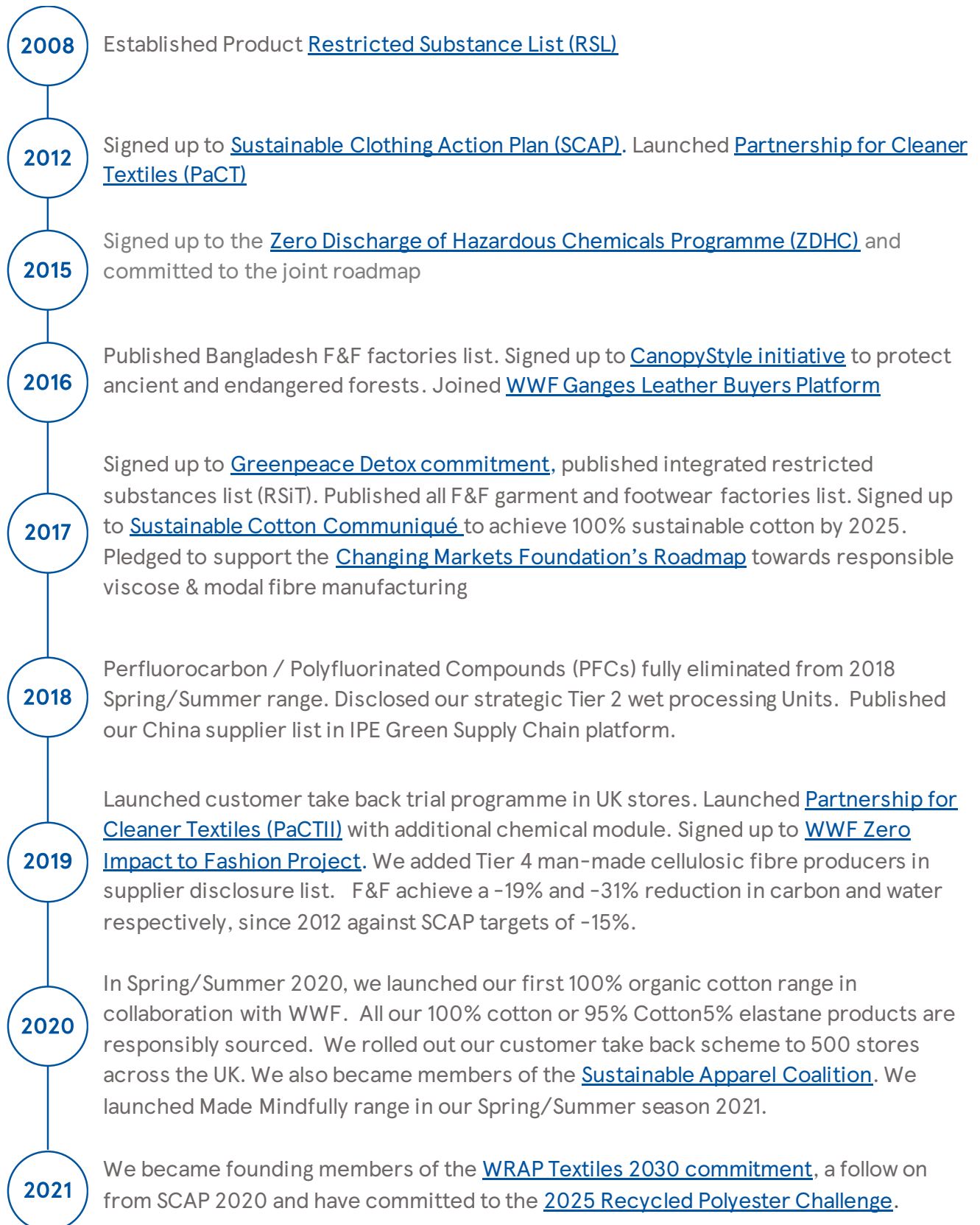
This year's update outlines our progress on effective chemical management in our supply chain, as well as progress against the Detox Commitment to promote sustainable chemical use.



In March 2021, we launched our Made Mindfully symbol to help customers identify products that are produced, grown, or made in an environmentally responsible way. Currently, over half of our clothing is Made Mindfully, using responsibly sourced materials including organic cotton and recycled polyester. We also apply the Made Mindfully symbol to our toys, greeting cards and home textiles. Further information can be found on our [Made Mindfully](#) pages.

Elimination of hazardous chemicals and chemical compliance framework remains in our core sustainability strategy, we ensure this requirement is integrated in our supply chain and continue to expand into wider industry solutions programme across our F&F Clothing and General Merchandising categories.

Our sustainability journey.



1. Continue to focus on inputs chemistry and adapt industry tools

To become effective in monitoring hazardous chemical formulations, using common tools developed and accredited by the industry remains essential. We are expanding the coverage to recognise the adoption of all the chemical screening and inventory management tools recognised by Zero Discharge and Hazardous Chemicals (ZDHC). There were five additional capacity building sessions to get suppliers more familiar with these tools and building their confidence to apply them.

Key highlights

- Tesco has worked with International Finance Corporation (IFC) to expand the chemical module in [PaCTII](#) to support the implementation of the Detox commitment which is completed in 2021. This programme consists of capacity building using ZDHC approved modules and tools, site visits, data tracking and engagement. As a result, all participating factories have shown a clear reduction in the number of non-compliant chemicals towards [ZDHC Manufacture Restricted Substance List \(MRSL v2.0\)](#), quantity of hazardous chemicals use, quantity of hazardous sludge generated when compared to the baseline in the first 2019 assessment. It was observed that up to 100% of ZDHC MRSL non-compliant chemicals were substituted. Suppliers have also shown significant reduction in salt consumption from 10-20% on average through optimising the process parameters in pre-treatment and dyeing. This has reduced the total dissolved solids content in discharged water from wastewater treatment plants.
- We have made it mandatory for our key wet processing mills to subscribe to chemical inventory management platforms - [CleanChain](#), [BVE3 Environmental Emission Evaluator](#) and [GoBlue Hive](#) - which are based on data from the [ZDHC Chemical Gateway](#). We also continue advocating chemical suppliers to register on the Gateway to improve its coverage. We have observed the transparency of the chemicals used has significantly improved. These platforms enable wet processing mills to manage their chemical procurement more proactively against the [ZDHC Manufacturing Restricted Substances List \(MRSL\)](#) and [Tesco's Restricted Substances List \(RSiT\)](#). This approach has enabled us to access the data shared by our wet processing units, which in turn has helped us monitor our supplier progress on use of more sustainable alternatives.
- We continue to share new business case studies based on research from our key mills and work with industry experts to assess chemical inputs to identify the root cause of positive results found in wastewater testing. This has helped key mills to eliminate hazardous formulation even at a contamination level, by using best practice solutions which are shared with the wider supply chain and stakeholders.

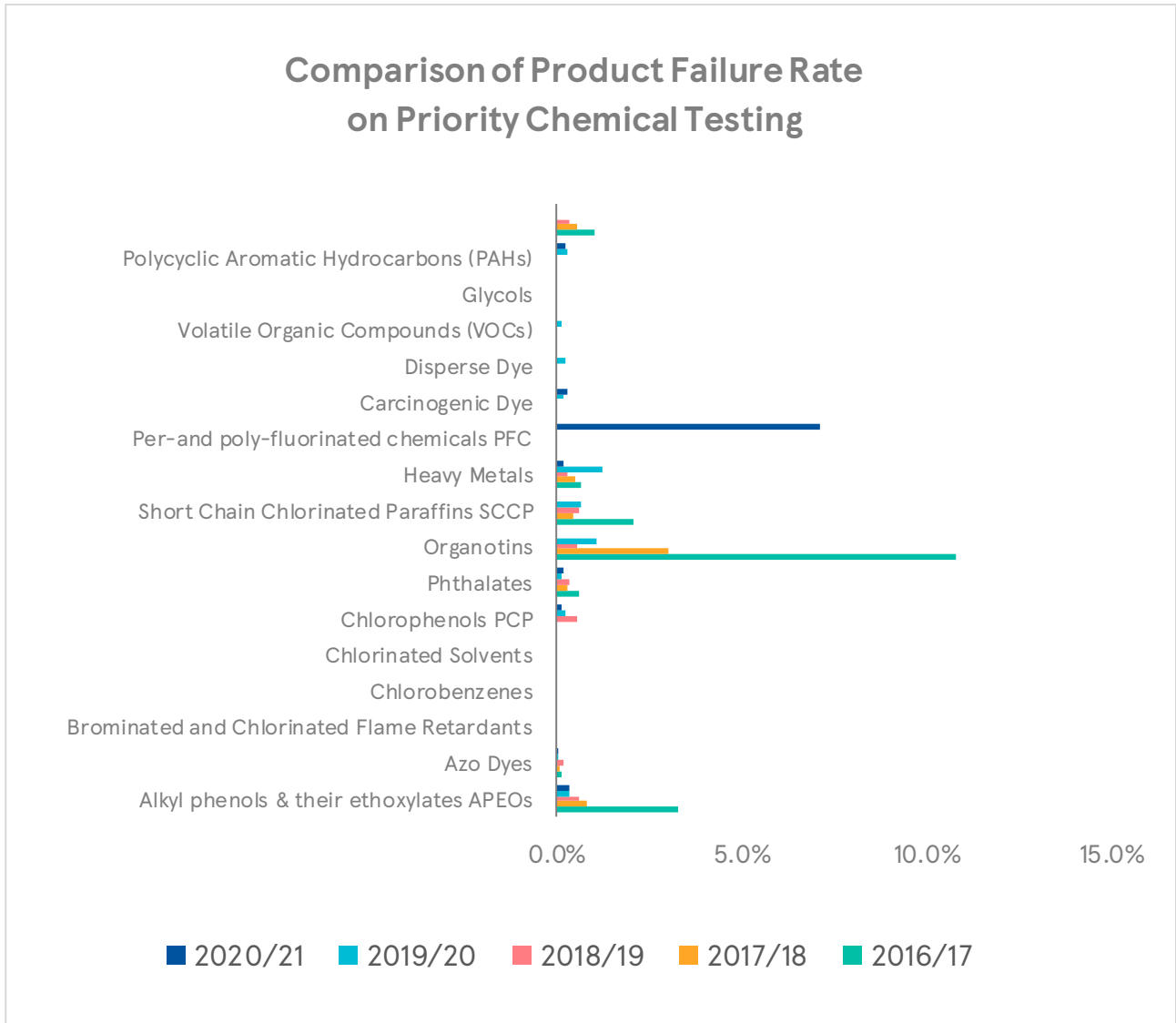
2. Using our strong relationships with suppliers to improve performance and transparency

We work in partnership with our suppliers to build long-term relationships and provide ongoing training and guidance to upskill and improve performance. This enhances trust and increases transparency, making full mapping of our supply chain more feasible.

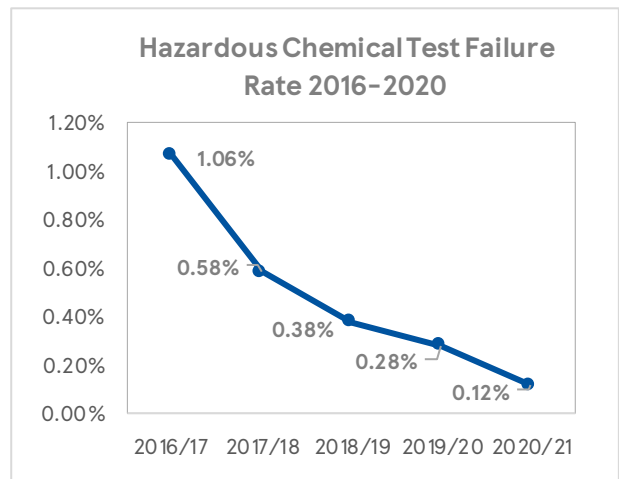
Key highlights

- We have improved our transparency and published our clothing supply chain list beyond first tier (clothing and footwear manufacturing) and second-tier wet processing units as well as man-made cellulosic fibres (MMCF) producers. This list has also been published and shared in [IPE Green Supply Chain Map](#) and [Open Apparel Registry](#) to support transparency and collaboration in the industry. Our effort was recognised by IPE in their [Corporate Information Transparency Index \(CITI\)](#) where we ranked 15th amongst 538 companies rated in 2020 (up from 20th in 2019). The Changing Market Foundation [Dirty Fashion Disrupted 2020 report](#) continued to rate us at ‘frontrunner’ level in terms of how we are progressing towards a more responsible viscose supply chain.
- We continue to host webinars through our Supplier Network Platform on chemical compliance, ZDHC standards and tools to support implementation. With the COVID-19 pandemic, we are aware how important it is for us to ensure suppliers can access training resources and remain up to date with new information. We continue to organise monthly webinars open to our supply chain, inviting industry expertise as guest speakers. We have also consolidated relevant external training resources in the platform to ensure they are accessible to suppliers. In 2020/21, 14 training sessions were held by Tesco F&F with 429 participants, which means that since 2014 we have reached over 1,897 participants to build their capacity with practical knowledge on chemical management.
- We continue to work with our supply chain partners, supporting them to build capacity and empower their team to take responsibility for managing their upstream supply chain. Their technical representatives must attend a comprehensive training programme and pass an examination with satisfactory level of performance before they are certified. The training has reached over 142 people who can now act as an extended implementation team to administer our chemical management and material quality requirements. In 2020, a further 57 supplier technical representatives completed and passed a more advanced level, “train the trainer”, technical specialist assessment and 16 also achieved the ZDHC Top 10 issue certificates. At present six of them are certified to conduct Tesco Textile Manufacturing Mill Audits.

Continue improvement in product compliance

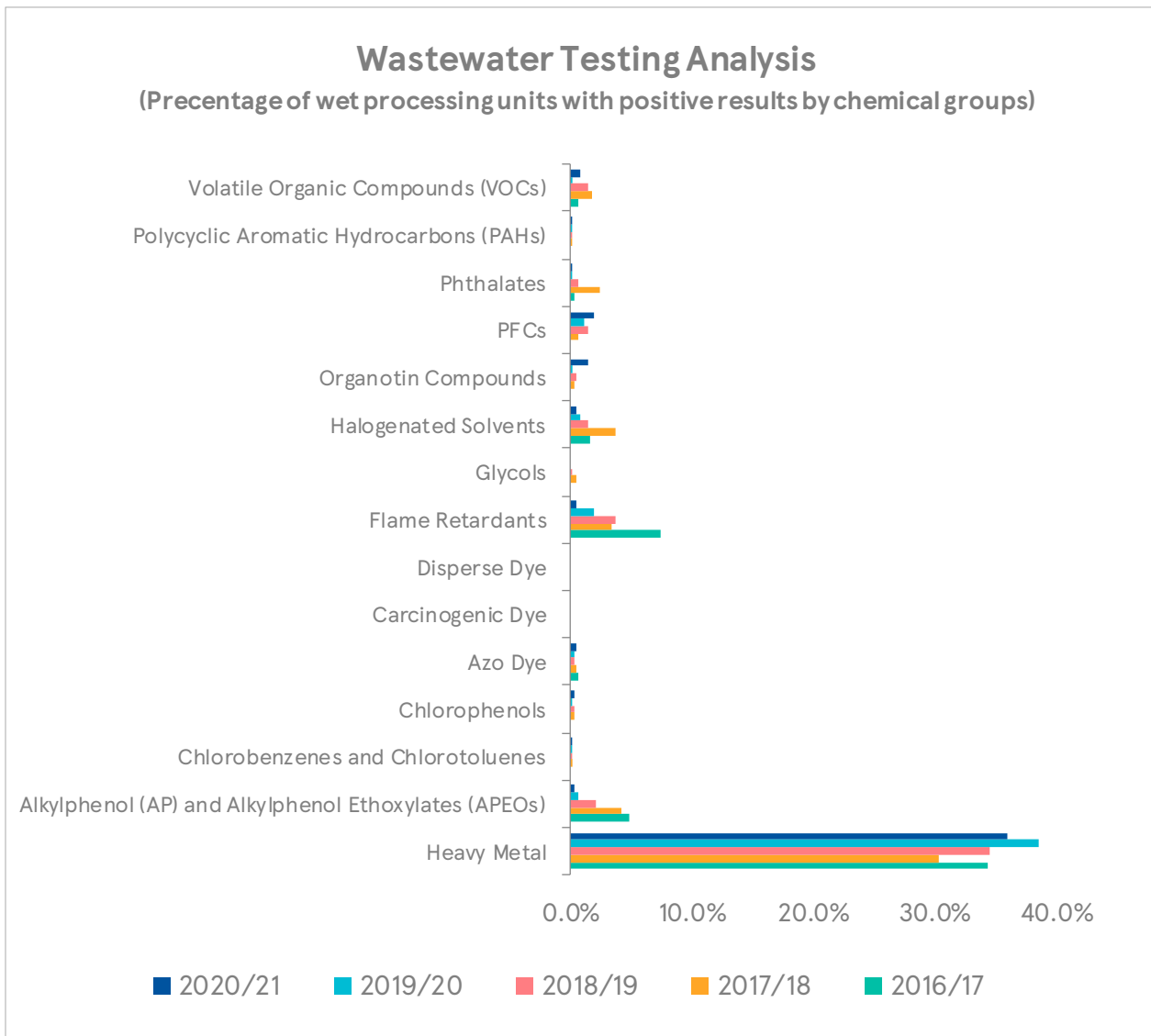


We continue to monitor levels of priority hazardous chemicals in final products, through our regular due diligence testing. Since 2016/17, the growth in awareness of different chemicals and hazardous substances has led to an increase in the number of chemical tests we have administered on products in the last four years by 93% and a reduction in chemical groups found. Those we identified in testing are APEOs, PCPs, PFCs, PAHs, phthalates, carcinogenic dyes, and heavy metals.



In terms of overall chemical testing, failures have reduced from 1.06% in 2016/17 to 0.12% in 2020/21. All products that fail a chemical test are removed from production and shipment. Corrective and preventive action plans are required along with an investigation into their root causes.

Cleaner wastewater discharged



We continue to verify the successful implementation of our hazardous chemicals controls by regularly checking the wastewater quality from the tier-two wet processing mills operated in our supply chain. The number of wastewater tests conducted continue to increase by 109% between 2019/20 and 2020/21 which cover 80% of our production capacity. Wastewater testing results continue to show progress with positive results reduced from 3.1% in 2016/17 to 2.5% in 2020/21. Chlorobenzenes and chlorotoluenes, PCPs, AZO, PAHs and VOCs have reduced to very low levels, between 0.1-0.8%. Four chemical groups show a steady reduction over the last year. APEOs, flame retardants, halogenated solvents, and phthalates reduced from 0.6% to 0.3%, 1.9% to 0.5%, 0.8% to 0.5% and 0.2% to 0.1% respectively. From tests, no positive results for disperse dyes, carcinogenic dyes, and glycols were recorded. Heavy Metals remain the most challenging group of chemicals to address as there are fewer alternatives. Some examples of our efforts to help our supply chain to make more targeted improvement on these chemical groups are shared in detail in the appendix section.

3. Working with industry and sector initiatives to drive best practices

We recognise that we can only achieve the elimination of harmful chemicals and build a sustainable future by working in collaboration with other brands, retailers, and stakeholders. We are members of several industry groups that are helping to establish common industry standards, provide tools to support implementation and share best practices.

Key highlights

- Since joining the Zero Discharge of Hazardous Chemicals programme (ZDHC) in 2015, we have continued our effort to support the development of ZDHC tools as well as promoting the adoption. Our wet processing mills have increased transparency by publishing their wastewater reports in [Detox.Live](#). Including IPE, our mills have published wastewater reports covering over 80% of our production capacity. To keep the momentum of continuous improvement, in the last four years we have given out 27 ZDHC supplier awards to recognise the efforts made.
- We know resolving sustainability issues will not be achieved alone; collaboration is the key driver to change industry practices. In 2020/21, we signed up to [Sustainable Apparel Coalition \(SAC\)](#) and started our journey to implement [HIGG index](#) recommendations. We have also made a commitment to the [WRAP Textile 2030 commitment](#) to reduce our carbon and water footprint by 50% in our products and services by 2030. For synthetic fibres, we have committed to the [Textile Exchange 2025 recycled polyester challenge](#), where signatories are collectively aiming to meet a 45% recycled volume by 2025 and to reach 90% recycled volume by 2030. We are also an active member of both [Textile Exchange \(TE\)](#) and [Industry Acting on Microfibre \(IMF\)](#) and contribute to their task teams.
- We have collaborated with [WWF – Hong Kong in Making Zero Impact Fashionable](#), a two-year programme to empower suppliers to reduce carbon emissions in China and India. Some of our mills have signed up to the Low Carbon Manufacturing Program (LCMP) to learn the use of greenhouse gas (GHG) accounting tool and receive information about industry best practices on energy efficiency. In 2021, two of our mills were awarded a silver and one a certified level by WWF for industry accepted carbon reductions. The mills carbon results were verified and achieved 10-17% reduction in carbon intensity. The performance of the participating mills are recognised in the industry sector as improved, but we know more is needed in the GHG management system. Although the effects of the pandemic continue to make physical factory visits challenging, we continue to look for opportunities to engage and build capacity in our supply chain, through virtual and remote options.

Progress against our Detox commitment.

The Greenpeace Detox Campaign aims to eliminate hazardous chemicals in the manufacture of clothing and textile products and promote the adoption of business models to achieve more sustainable consumption of textiles. Our Detox commitment focuses on seven areas of action where our priorities align with those of Greenpeace.

1. Supply chain disclosure

We continue to publish and update our [Restricted Substances List in Textile, Leather & Footwear \(RSiT\)](#) on our website. In 2020, we have disclosed 100% of our Tier 1 clothing and footwear suppliers, over 80% Tier 2 wet processing mills and 87% Tier 4 man-made cellulosic fibre (MMCF) producers by production coverage. This can be found on our policy page [here](#). Wet processing units representing over 80% of our production capacity have also tested their wastewater and published their results either on [IPE Detox Platform](#) or [ZDHC Wastewater Disclosure Portal – Detox.live](#). This year, with the newly added feature, it can show the connections between our Tier 2 mills on the platform. We will continue to improve our transparency and aim to reach 100% coverage by 2025 for all our Tier 2 suppliers and 100% coverage by 2021 for all our Tier 4 MMCF producers. We have also shared our list of suppliers located in China through the [Institute of Public Environmental Affairs \(IPE\) Green Supply Chain Brand Blue Map](#) and encourage them to disclose environmental data to the Pollutant Release and Transfer Registers (PRTR) on this platform. We also actively made our supplier list available in the [Open Apparel Registry](#) which supports the industry effort in making data more robust

and effectively apply across common initiatives.

2. Priority hazardous chemical groups elimination policy

Our chemical compliance policy has moved beyond elimination of hazardous chemicals in outputs from the manufacturing process to focus on input chemistry of 11 priority chemicals. Since 2019/20, we have added five additional chemical groups in our product test programme which is aligned with ZDHC MRSL and Wastewater Testing Guidelines. We also stipulate in our chemical compliance policy that all our supply chain partners must comply with our RSiT requirements and our key strategic wet processors must utilise the ZDHC accredited chemical management platforms to monitor their input chemicals. Where feasible, partners must use more sustainable alternatives and less chemicals in their production process to minimise the chemical footprint. Through the [Partnership for Cleaner Textile \(PaCTII\)](#) programme a number of business cases have successfully achieved chemical reductions.

3. Alkyl phenols & their ethoxylates (APEOs) elimination policy

We have achieved 100% elimination of intentionally added APEOs. As APEOs are widely used in the industry, some contamination issues remain and are being investigated. Our product testing shows that the occurrence of APEOs has reduced further from 0.6% in 2018/19 to 0.4% in 2020/21 and wastewater positive results from 2.2% in 2018/19 to 0.3% in 2020/21. In

2020, we continue to work with industry experts to support our mills with APEOs wastewater positive results to eliminate their input sources. Learnings are shared through webinars within our supply chain.

4. Perfluorocarbon / Polyfluorinated Compounds (PFCs)– elimination policy

Tesco has followed the Detox recommendations by listing all relevant individual PFCs in our list of restricted substances. PFCs are banned for use in our production according to our chemical compliance policy. Since 2018, all our products which require water repellent properties have used PFC-free finishes. Our product testing shows 100% performance compliance. In our due diligence check, there were two cases reported this year. These low concentration cases were from contamination and were all removed from shipment. We analysed the root cause and applied corrective and preventative actions.

5. Targets for other hazardous chemicals

Our [Restricted Substances List in Textile, Leather & Footwear \(RSiT\)](#) is reviewed and updated every six months and can be found on our website. We ensure restricted substances not only meet minimum legal requirements of regions in which we sell our products, the RSiT goes beyond these levels by adhering to voluntary industry standards. Our latest list was published in August 2021 with 21 new chemicals added. Our Manufacture Restricted Substance List aligns to the latest version of [ZDHC MRSL v2.0](#).

6. Responsible consumption, closed-loop operations across global supply-chain and product lifestyles

As part of our [Little Helps Plan](#), we are committed to reducing the environmental impact of our supply chains, promoting closed loop systems and encouraging responsible consumption. We know that these are issues that our customers care strongly about, and we want to make it easier for them to play their part by recycling unwanted clothing, shoes, and home textiles. After running a successful pilot in April 2019, we have rolled out our customer take back scheme to 500 stores across the UK. Customers can donate clothing, shoes, and textiles from any brand and of any quality in our conveniently located collection units at the front of stores. Together with the textile banks in our car parks, we have collected over 12,000 tonnes of clothing, shoes, and home textiles in 2020, representing about 40% of the product weight sold by F&F.

7. Self-reporting on the DETOX Commitment

This report is our principal account of our work to deliver our [DETOX commitments](#) and we will continue to report against our progress annually.



Future Priorities.

We are grateful for the achievements made with our supply chain partners on the journey to eliminating hazardous chemicals and moving towards more sustainable chemistry, but we also recognise there is more work that we need to do.

- We continue to increase the coverage of our supply chain through wastewater testing with the aim of reaching 100% coverage by 2025. We are tightening our measures to onboard new suppliers. This year, we have supported our suppliers to enroll to the [ZDHC Supplier to Zero \(StZ\)](#) and [SAC FEM](#) programmes. This will give suppliers a deeper understanding and support a more holistic approach to implementing a best practice chemical management framework and help expand their efforts to other environmental parameters.
- We remain committed to supporting our man-made cellulosic fibre supply chain (MMCF) with closed-loop production models through our “Roadmap to responsible viscose and modal manufacture”. Reducing chemical use and promotion of circularity will continue to be vital to addressing our environmental impact. By supporting the Textile Exchange MMCF roundtable in developing the self-assessment questionnaire and transparency dashboard, we are encouraging our MMCF producers to use the template and make more disclosures on their progress available.
- In addition to chemicals, we are also piloting a circular model with our supply chain partners, which involves taking back industrial wastes and recycling. We hope this will give us further insights to develop a commercially feasible solution.
- Our home and nursery textile supply chain continued to follow the same path to eliminating priority chemicals as our clothing supply chain with good progress. By 2022, we aim for home and nursery textile, wet processing mills that account for at least 80% of our production, to disclose their mill list.
- F&F will continue to set new stretching goals and aim to raise the bar within our sector. We are part of the ZDHC community and will reinforce our policy and implementation efforts to advance the industry standards and tools. We are committed to being an active member of major industry collaborations and will continue to support the sector in its transformation to being more sustainable.



Key links.

Detox Commitment

[Restricted Substances list in Textile, Leather and Footwear \(RSiT\)](#)

Clothing supplier list

2020 Technical case studies on chemical substitution:

[Substitution Case Study for Antimony](#)

[Substitution Case Study for PFCs](#)

2019 Technical case studies on chemical substitution:

[Substitution Case Study for NPEOs \(a\)](#)

[Substitution Case Study for NPEOs \(b\)](#)

2018 Technical case studies on chemical substitution:

[Substitution Case Study for Carcinogenic aromatic amines](#)

[Substitution Case Study for Chlorophenols](#)

[Substitution Case Study for Organotin](#)

2017 Technical case studies on chemical substitution:

[Substitution Case Study for APEOs \(a\)](#)

[Substitution Case Study for APEOs \(b\)](#)

[Substitution Case Study for Chlorinated Compounds](#)

[Substitution Case Study for Phthalates](#)

[Substitution Case Study for Naphthylamine](#)