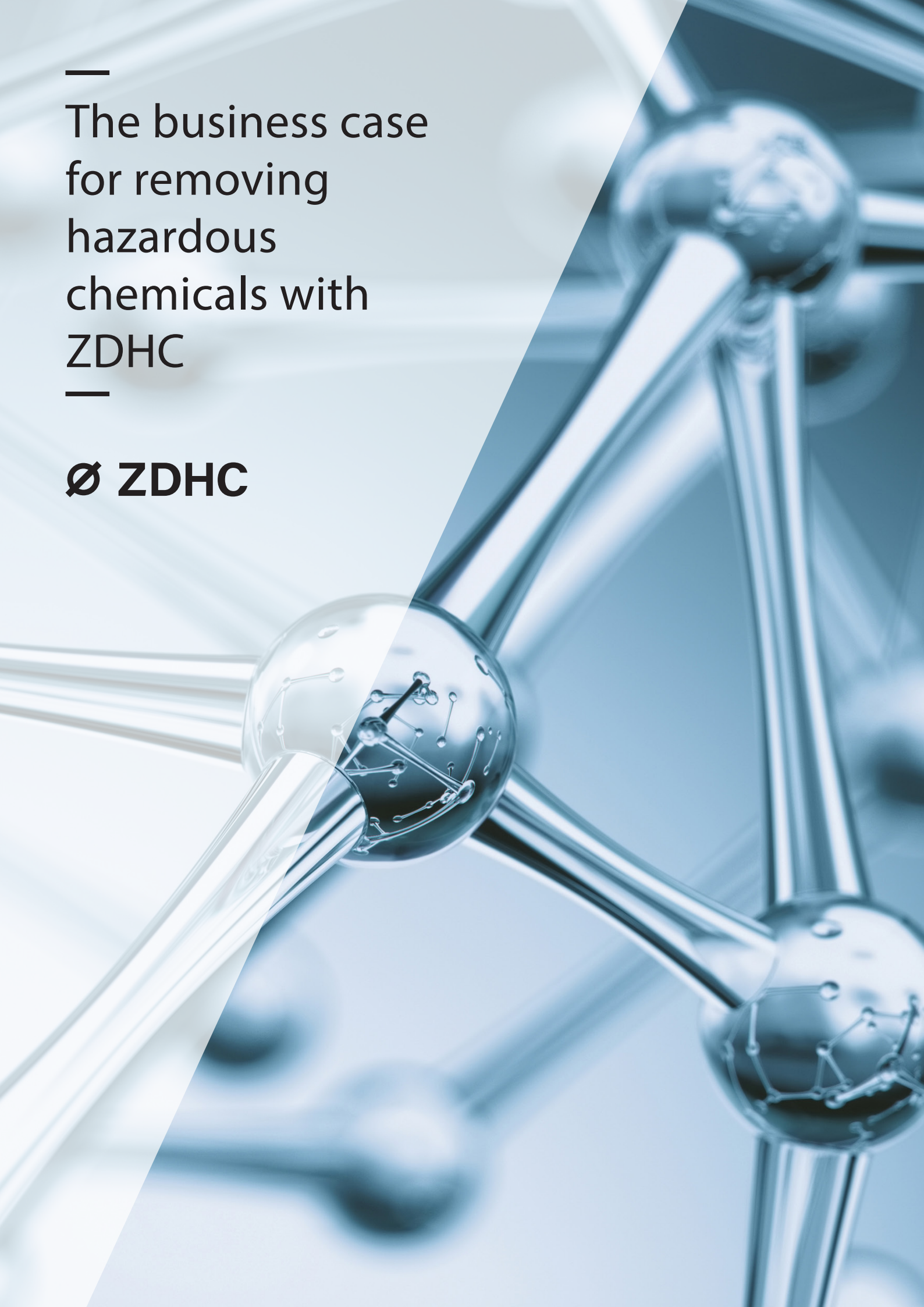


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# The business case for removing hazardous chemicals with ZDHC

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**Ø ZDHC**



# Executive summary

## **The use of chemicals in the fashion industry's supply chain has a significant impact on the environment**

The fashion industry is an enormous industry, with an estimated value of USD 1.3 trillion and employing more than 300 million people along the value chain.<sup>1</sup> The supply chain is fragmented, with many different process steps and stakeholders involved in creating a fashion item: designing, agriculture and synthetic yarn production, tanning (for leather), spinning, fabric construction (for textiles), dyeing, finishing, assembly, distribution and retail. Each of these process steps is associated with an external impact on the environment – and by extension on society. Typically, the earlier processing steps are associated with the greatest combined environmental impacts through water use, energy, waste, and pollution.<sup>2</sup>

The use of hazardous chemicals in textile and leather supply chains plays an important role in this regard, especially in wet processing. Considering that the use of chemicals overall

is increasing (the market value of textile chemicals worldwide increased by 22% from 2010 to 2015)<sup>3</sup>, concerns about hazardous chemicals in the textile and leather supply chains are only growing. Moreover, given that the fashion industry is predicted to grow by 40% by 2030<sup>4</sup> - and the use of chemicals with it - it is no surprise that there is considerable pressure on the entire industry to become more sustainable. Legal requirements are becoming stricter, and consumer demand for transparency and traceability along the supply chain has increased. High-profile media campaigns and NGOs such as Greenpeace explicitly urge companies to take more responsibility, not just for their own operations.

It is not easy to clean up the entire industry: given the complexity of textile and leather supply chains, tackling hazardous chemicals requires cooperation between many players along the supply chain. However, at the same time, it is worth noting that many companies see business opportunities associated with shifting to more sustainable activities.

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1 Ellen McArthur Foundation and Circular Fibres Initiative 2017, A New Textiles Economy: Redesigning Fashion's Future, viewed 22 November 2018, [https://www.ellenmacarthurfoundation.org/assets/downloads/A-New-Textiles-Economy\\_Full-Report\\_Updated\\_1-12-17.pdf](https://www.ellenmacarthurfoundation.org/assets/downloads/A-New-Textiles-Economy_Full-Report_Updated_1-12-17.pdf)

2 Kering Group 2017, 'Environmental Profit and Loss Account (EP&L)', viewed 26 November 2018, <http://www.kering.com/en/sustainability/results>

3 Chemarc on Statista 2018, Market value of textile chemicals worldwide from 2010 to 2020 (in billion U.S. dollars), viewed 22 November 2018, <https://www.statista.com/statistics/857004/global-market-value-textile-chemicals/>

4 Global Fashion Agenda and The Boston Consulting Group 2017, Pulse of the fashion industry, viewed 22 November 2018, [https://globalfashionagenda.com/wp-content/uploads/2017/05/Pulse-of-the-Fashion-Industry\\_2017.pdf](https://globalfashionagenda.com/wp-content/uploads/2017/05/Pulse-of-the-Fashion-Industry_2017.pdf)

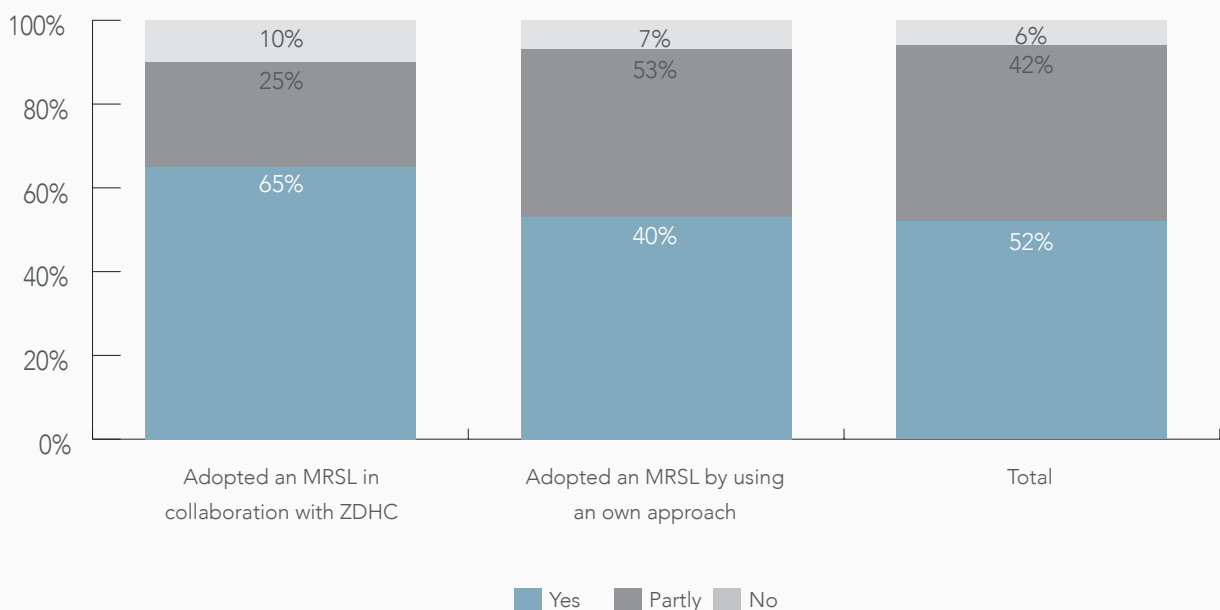
## As an industry initiative, ZDHC coordinates efforts

ZDHC is a not-for-profit organisation with the vision to phase out hazardous chemicals and drive the widespread implementation of sustainable chemistry, related innovations and best practices in the textile, apparel and footwear industry. It was started in 2011 by six apparel brands joining together to establish a Joint Roadmap with a mission of catalysing positive change in the discharge of hazardous chemicals across the textile and leather product life cycle. The organisation works towards this goal through common programmes and tools, notably a list of restricted substances in manufacturing ("manufacturing restricted substances list", MRSL).

## Companies across the supply chain agree that removing hazardous chemicals makes sense from a business point of view

To gain a deeper understanding of the case for removing hazardous chemicals from the textile and leather supply chain, ZDHC asked PwC to explore perspectives from a company point of view. Based on interviews and a survey of 32 major companies from across the textile and leather supply chain (manufacturers, chemical formulators, brands and retailers), PwC explored what incentives these organisations have to remove hazardous chemicals from the production process and what challenges they face.

### Do the benefits of implementing an MRSL outweigh the costs?



The survey results show that the majority of respondents agree that there is a case for removing hazardous chemicals. This message is shared among all players across the supply chain: not just brands and retailers agree, but also manufacturers and chemicals formulators. The majority of respondents agreed that the benefits of implementing an MRSL outweighed the costs. This message was particularly strong from companies stating that they had adopted an MRSL in collaboration with ZDHC.

**“Input management should be seen as a license to operate, not an additional cost.”**

Global brand

With respect to the different areas of the ZDHC programme, responses suggest that the benefits of implementing a system of input management were particularly pronounced. The feedback was less clear regarding process management, with a majority of respondents unable to state whether the benefits outweighed the cost.

Moreover, respondents indicated that it does not take big teams to act. Typically, respondents stated that 0-2 FTE were required, although one major global brand indicated that up to 10 FTE were working on the topic.

Another point of note is that the majority of respondents indicated they did not need to set up new systems or programmes from scratch - instead, they typically stated that they had adapted their existing programmes to include the restriction of hazardous chemicals.

**Information is scattered – therefore quantifying the benefits of doing the “right” thing is difficult**

Most respondents were able to indicate the relevance of costs and benefits, but did not provide any quantitative information.

Comments made by a number of respondents suggest that costs and benefits relating to sustainable chemicals management were not currently monitored within their organisation, and that quantification would therefore require significant effort in reaching out to many different departments within the company, which was seen as unfeasible for the purposes of the survey.

Moreover, a number of comments imply that the ZDHC programme is not yet fully mature. This is also shown by the link between the level of satisfaction among respondents and the level of maturity of the various areas of the ZDHC programme. Those areas of the programmes that have existed for a few years scored higher ratings than the ones that are relatively new.

### **Harmonisation and convergence are key for future success**

One of the main outcomes among the respondents is that further convergence within the ZDHC programme is needed, since there is a relatively wide variety in engagement and alignment among the various ZDHC contributors. This puts some limitations on the efficiency that ZDHC can achieve at this moment – and going forward with a common approach is required that everyone agrees with.

One important thing to keep in mind is that this is a shared responsibility of ZDHC and its contributors and this responsibility is twofold. Firstly, companies have an external responsibility towards their stakeholders and as part of their ZDHC contributorship. Companies have a role to play in establishing a flourishing industry-wide initiative, which is a prerequisite for overcoming collective

action problems in the sector such as the lack of transparency and the absence of a widely adopted common language.

**“Only with an industry-aligned MRSL do we have the leverage to bring the industry to the next level”**

Global brand

Secondly, companies also have an internal responsibility to accelerate progress with removing hazardous chemicals from their supply chain and/or production processes, and to translate the common standard set by the joint initiative into their own organisation. It is ZDHC's responsibility to support them in this effort by pushing for harmonisation and common tools, and by assisting knowledge sharing processes. Besides a standardised industry-wide MRSL, this involves convergence not just of an MRSL but also of audit protocols, as well as secure platforms for information exchange.



# “The degree of benefit depends on the number of brands that adopt the MRSL of ZDHC.”

## Manufacturer

Sustainability departments will need to reach out to other functions within their organisation in their efforts to remove hazardous chemicals from supply chains. They may play a crucial role in helping other functions gather information or change decision-making processes. Only when impact pathways – i.e. the way business decisions are linked to environmental impacts – such as hazardous chemicals are fully understood can companies really start to develop metrics to help monitor their progress and provide them with the right tools to act.

Finally, it is worth noting that removing hazardous chemicals need not only be associated with managing risk but is often linked to innovation. For instance, circular economy thinking results in new business models and lower raw material inputs and improved digital technologies enable better traceability and higher transparency in the textile and leather supply chains.

