

CLEANING UP OUR CHEMICAL HOMES CHANGING THE MARKET TO SUPPLY TOXIC-FREE PRODUCTS

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EXECUTIVE SUMMARY

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Can we enjoy modern consumer products without their having to contain hazardous chemicals? Is it unrealistic to expect companies to substitute these substances with safer alternatives and achieve the same technical performance at a reasonable cost? Is substitution a vague aspiration for the future but not for the real world?

Greenpeace's Chemical Home database was launched in 2003 to demonstrate that the substitution of hazardous substances with safer alternatives is already happening. In many cases, the use of hazardous substances is not necessary, as suitable alternatives are already being used by innovative companies that want to be market leaders. Our database also supports the need for legislation by highlighting those companies who fail to act to phase harmful substances out of their products.

This report reviews the progress that companies have made towards substitution during the life of the database. It shows that consumers can choose from many products that are already free of these substances, and that many companies have embraced the process of substitution by phasing hazardous substances out of their brands. The EU's proposed REACH legislation could bring substitution into the mainstream if the substitution principle were at its heart, namely, that no harmful chemical should be authorised for continued use if safer substitutes are available.

The Development of the Chemical Home

The Chemical Home lists products such as cosmetics, household products, toys, sports shoes, pyjamas, paints and electronics. Based on correspondence with the manufacturers, those products likely to contain hazardous substances were graded red. Equivalent alternative products that the manufacturer stated are free from hazardous substances were listed as green. Where the manufacturer had made commitments to phase out the hazardous substances, an amber grade was given.

The database was available in six European language versions as well as the international version, and enabled consumers to identify products that might contain hazardous substances. This, in turn, encouraged manufacturers to give more priority to substituting hazardous substances with safer alternatives, thereby proving that substitution is possible. A number of companies made considerable progress in substituting hazardous substances, some of which have been upgraded to amber or green. Their actions should convince decision-makers of the workability of substitution.

Chemicals Out of Control

Hazardous substances that are commonly used as chemical additives in consumer products can migrate out of the product over time. These same chemicals are consistently found in breast milk and umbilical cord blood, which demonstrates their wide, uncontrolled and undesired dispersion. Greenpeace testing has shown that hazardous, man-made chemicals are also widespread in house dust, rainwater and the bodies of eels. These substances can cause a wide range of health effects, including effects on the reproductive system, immune system and impacts on the nervous system and behavioural development. Exposure of the unborn child to minute quantities of hazardous substances can result in permanent irreversible damage.

Inside the Chemical Home

To investigate the use of hazardous substances such as phthalates, synthetic musks, brominated flame retardants, organotin and nonylphenols, Greenpeace commissioned chemical analysis of a variety of everyday products. The results were presented in 11 reports, beginning in October 2003. One report focused on Disney children's garments throughout the world; another on 36 well-known perfumes. The product sampling showed the widespread presence of various hazardous chemicals in many products, sometimes at quite high levels.

Over the years that the Chemical Home has been live, some product sectors have made more progress towards substitution than others. In particular, sports shoe companies have shown themselves to be well informed and on the whole progressive, with the majority earning amber or green grades. Electronics companies have also been quick to respond to the challenge of substitution, and although many remain graded red, a significant few, including market leaders Dell and Nokia, have developed policies on chemicals and substitution¹. With a few exceptions, larger companies in the household products, cosmetics and perfumes sectors have been slow to change, in comparison to smaller, more alternative companies in these sectors.

The speed of change by some companies shows that alternatives for many uses of hazardous substances are already available or at least are already being evaluated for substitution. These companies prove that substitution is not a future goal but is possible and is happening today.

In contrast, the large number of companies and brands that remain graded red shows that some companies are unwilling to make any changes unless forced to do so by legislation, even amongst some of the larger companies on the database.

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What the companies say

As part of this report, we undertook a small survey of 11 of the companies that were upgraded since the launch of the database. The biggest factor motivating companies to substitute hazardous substances with safer alternatives was increased customer confidence, followed by the benefits of being seen as a market leader. A company's core values and ethos, such as commitment to the precautionary principle, were also a major consideration for some.

For most businesses, substitution is not a quick fix but a long and complex process involving suppliers, customer feedback and external authorities, as well as a lot of work internally. It is also a process that encourages innovation.

Advantages included improvement in product quality, greater transparency and better goals and objectives, reduced environmental impact and the market advantage of being prepared for future market requirements as well as being competent at the substitution process. Immediate benefits were sometimes hard to evaluate, and some disadvantages were also mentioned.

In general, companies were in favour of the process of substitution and of the need for REACH to stimulate this, as well as to encourage innovation, create greater confidence in chemicals and provide better information about chemicals to assist the selection of materials.

Findings

By moving towards the use of safer alternatives to hazardous chemicals, companies are showing the workability of the substitution process and are leading a new trend towards products that don't contain harmful substances. However, substitution requires commitment and innovation; for most companies there are too few incentives, hence the large number of companies that remain red on the database. Current legislation, which is piecemeal in its approach, has not proved enough of an incentive and has failed to achieve substitution of hazardous substances with less hazardous alternatives.

REACH needs to create a single route to authorisation and a requirement for substitution, wherever possible, for 'substances of very high concern'. This will level the playing field and create demand for safer alternatives, increase consumer confidence and stimulate innovation and competitiveness of the chemicals industry and downstream users in Europe. Most importantly, an end to the unnecessary use of the most hazardous substances will begin to reduce the levels of such chemicals in the environment and, as a consequence, our exposure to them.

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