

# Substitution beyond the buzzword

Alternative providers need exposure if substitution is to become more than a concept



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Online dating is probably one of the most common ways to meet a partner nowadays. Friends of mine used to joke that they met on a trip to Madagascar. When everyone's eyebrows rose, they admitted that it was a dating site that brought them together as if that is embarrassingly common, and the Madagascar story sets them apart and makes their relationship a little bit more special than others.

All jokes aside, I actually think that dating sites manifest one of the best and most intrinsic qualities of the internet: to connect people. And, of course, this attribute can be used for more than dating and finding a new partner – it can also be used to speed up the transition from hazardous chemicals to safer alternatives.

This is why ChemSec launched the [Marketplace](#) this spring. The idea is very simple: a site where producers of alternatives can advertise and where potential buyers can browse or create requests for alternatives. The information required is not very extensive; the Marketplace only serves as a medium to connect companies and the new potential partners will need to sort out all the details between themselves away from the site, just as with any online dating site.

I believe that this project has great potential to tilt the market in favour of safer alternatives. One of the key components is that the information provided comes directly from companies themselves. Even if regulation and policy incentives can be drivers for substitution, the actual footwork and momentum are provided by innovative companies.

Ever since I started working for ChemSec, substitution has been a key component of

all my work. I have been heavily involved in the Subsport project, the Substitute It Now! (SIN) List and now the Marketplace. In addition, I have held seats on several committees, advisory boards and discussion groups for various initiatives, governments and organisations, including Echa, the OECD and GreenScreen for Safer Chemicals. I have also given lectures and training to companies on how to approach substitution.

My confidence in the Marketplace is based on this experience, together with a sense of frustration that has been building up over the years. In the policy world, substitution is a concept, a buzzword. It is something everybody wants to be part of, even though substantial resources are rarely invested in it.

If I may generalise, initiatives usually start by mapping out those already existing, discussing them a bit and elaborating on whether they can be connected somehow. After this, the discussions tend to die out and not much more happens.

While this goes on year after year, in windowless meeting rooms and on email list servers, there is another reality: the corporate reality, which does not wait on the conclusions of these landscape analyses. Alternatives to hazardous chemicals are in demand and they are being developed. The business world does not necessarily call this substitution. Instead they call it innovation, portfolio optimisation, corporate social responsibility, green chemistry and many other things.

This reality must be reflected and included in any stakeholder initiative to boost substitution. 'Allowing' the companies themselves to formulate their ads on our website might sound naïve, but we have chosen to trust them to comply with our criteria and to let that the system be self-sanitising.

ChemSec is, of course, aware that there are critics out there who think the Marketplace is a 'greenwash' opportunity, since many of the advertising companies manufacture not only alternatives but also large volumes of hazardous chemicals. But we think it is possible to keep two opposing views in mind at the same time, meaning we can both criticise a company for its portfolio of hazardous substances but also provide a marketing platform for its safer alternatives.

Approaching chemicals on a case-by-case basis is the only rational thing to do, and that is exactly why other ChemSec tools, like [the SIN List](#) and [the SIN Producers List](#), clearly show which companies produce hazardous substances and in what volumes. The Marketplace, by contrast, is about identifying solutions and showing the way forward. ChemSec believes that increased sales of safer alternatives, rather than the same old hazardous chemicals, can push chemical producers to scale up R&D and the production of safer products.

Although substitution is a complex matter and can be a time-consuming and costly process, this need not always be the case. There are short cuts. Successful examples can be copied from others and many groundbreaking products have been developed already. It is therefore important to increase the visibility of the available alternatives.

Until now, there has not been an obvious place to market products based on their ability to replace highly hazardous chemicals. As one sustainability director told me, it is one thing to develop the good stuff, another to sell it. The sustainability and marketing departments are not always aligned. This can also be a problem for the downstream sustainability team – where to find safer alternatives. The Marketplace is an attempt to address this.

Since the launch of the Marketplace in May 2017, it now offers over 30 different advertisements from a wide range of alternative providers. But it is only when you look beyond this qualitative figure that things start to become really interesting.

Browsing through the ads, I can instantly spot a number of potential game-changers, because several of them present alternatives to politically 'hot' chemicals. One such is bisphenol A (BPA), for which the American company Valspar presents an alternative can lining, providing good evidence that the alternative material does not share the problematic properties of BPA.

In addition, German firm Ökobon has developed an alternative thermal paper that can be used with current thermal printers. In this case, it is a whole new technique, where the heat collapses bubbles in the paper to create the print, instead of the traditional approach where BPA is used as a chemical colour developer.

The Marketplace also offers a number of alternatives to replace fluorinated organic compounds in functional textiles. Companies providing alternatives include Beyond, Chemours, Huntsman, HeIQ materials, FML and Organotex. You can also find non-halogenated flame retardants and alternative solvents, as well as cleaners and corrosion inhibitors.

Moreover, Huntsman's and DyStar's alternatives to chromium-based (mordant) dyeing of wool are other interesting examples. This is particularly important as the European Commission will soon be deciding on an application for authorisation on the continued use of chromium-based dyeing of wool.

To me, it is clear that authorisation should not be granted for the use of an SVHC beyond the sunset date when alternatives are available. In this case, there are, as the Marketplace ads shows, and it should not be possible to ignore this.

Even though I have spent a good portion of this article trying to make a strong case for the need to include the corporate

reality in policy discussions, I still think that policy and regulations have an important part to play.

Since I meet with a lot of people who work at board level in chemical companies, I know that there is a sense of frustration when it comes to alternatives. These are often out there, but they can be difficult to sell, especially at first, because of their initial higher price. Granting authorisation when there are available alternatives is the opposite of encouraging companies to invest in new solutions.

There is a scary tendency that, even though the concept of substitution is considered something of a Holy Grail in chemicals policy, the concrete examples tend to get crucified when regulation is implemented. In the end, and in spite of all good stakeholder and corporate initiatives, clear, strong and predictable regulation would be the strongest driver of substitution – if it is carried out well.

*The views expressed in contributed articles are those of the expert authors and not necessarily shared by Chemical Watch.*

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