## Question F5: Safer alternatives

### Scoring Rubric

<table>
<thead>
<tr>
<th>CFP 2021 Survey</th>
<th>Manufacturer</th>
<th>No Manufacturing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Formulated Products &amp; Articles</td>
<td>Formulated Products</td>
</tr>
</tbody>
</table>

### Question F5

1. How does your company encourage the use of safer alternatives to chemicals of high concern?

   a. Our company encourages the use of safer alternatives to chemicals of high concern using methods listed in question 2, below.  
      n/a  n/a  n/a  n/a  n/a  n/a  n/a

   b. Our company does not encourage the use of safer alternatives to chemicals of high concern using methods listed in question 2, below.  
      n/a  n/a  n/a  n/a  n/a  n/a  n/a

2. Our company: (Follow up to question 1)

   Choose all that apply.

   a. has developed a definition for a safer alternative that is consistent with the CFP definition, and we include such criteria in our business processes,  
      1.00  1.00  1.00  1.00  1.00  1.00  1.00

   b. communicates about and asks suppliers to use our company’s criteria for a safer alternative,  
      1.00  1.00  1.00  1.00  1.00  1.00  1.00

   c. rewards suppliers that use safer alternatives,  
      1.00  1.00  1.00  1.00  1.00  1.00  1.00

   d. has integrated our company’s criteria for a safer alternative into our product and/or packaging development process (e.g., through our design and safety processes),  
      1.00  1.00  1.00  1.00  1.00  1.00  1.00

   e. has established a goal and is tracking progress to improve the profile of chemicals across our products and/or packaging, consistent with our company’s criteria for a safer alternative, and/or  
      1.00  1.00  1.00  1.00  1.00  1.00  1.00

   f. publicly discloses our company’s definition for a safer alternative and our approach to integrating it into our business practices.  
      1.00  1.00  1.00  1.00  1.00  1.00  1.00

   g. If neither your company’s products nor packaging contain chemicals of high concern, using the CFP CoHC Reference List, describe in documentation how it ensures that the safest chemicals available are used.  
      6.00  6.00  6.00  6.00  6.00  6.00  6.00

### F5 Maximum Points

6.00 6.00 6.00 6.00 6.00 6.00 6.00
Question F5: Safer alternatives

Explanation
This question asks about how your company encourages the use of safer alternatives to chemicals of concern. CFP defines a safer alternative as a chemical, material, product, process or technology that is less hazardous for humans and the environment than the existing approach. To define relative hazard, CFP uses the GreenScreen for Safer Chemicals methodology. CFP's definition of a chemical of high concern aligns with the criteria for a GreenScreen Benchmark 1 chemical. Alternatives meeting the criteria for GreenScreen Benchmarks 2, 3, and 4 would be considered progressively less hazardous.

Safer alternatives to the use of a hazardous chemical may include direct replacement with a less hazardous chemical. However, it is often difficult to identify a drop-in replacement. The use of alternatives that are structurally similar to the original chemical may result in a regrettable substitution, which is a chemical that proves to be equally or more harmful to human health or the environment.

It may be more effective to eliminate the need for the chemical through a product redesign or material change. Such changes are likely to be accepted by users if they provide the needed functional performance for a particular product. For example, water bottles made of stainless steel rather than polycarbonate eliminate the need to use BPA. Furniture made of inherently flame retardant materials such as wool rather than polyurethane foam can eliminate the need for chemical flame retardants. Technology/process changes can also offer a safer alternative, e.g., electronic receipts avoid the use of thermal paper that may contain BPA.

To encourage the use of safer alternatives, it is important that a company has defined this term and communicated its meaning and criteria to its suppliers. CFP encourages companies to define safer alternative in a manner that is consistent with the definition above. It is also important that criteria for safer alternatives are integrated into the product development process. Goal setting and tracking progress with regard to adoption of safer alternatives is also key. In addition, public disclosure of your company’s definition of safer alternatives and your approach to implementation indicates that your company takes improved chemicals management seriously.

The search for safer alternatives is an iterative process and often requires the use of alternatives assessment methods to compare chemical hazards, evaluate trade-offs, and determine whether a safer alternative is technically feasible and commercially available. The OECD’s Substitution and Alternatives Survey Toolbox includes a filterable inventory of chemical hazard surveys, data sources, and service providers to help organizations identify tools most relevant to their substitution and alternatives assessment goals.

Some companies develop lists of preferred chemicals or provide positive criteria for chemicals (for example, biodegrades readily). Including requirements for safer alternatives in contracts can motivate suppliers to seek out safer chemicals and materials. If these alternatives are not commercially available, these requirements can stimulate green chemistry research and development. Green chemistry is the design of chemical products and processes that reduce or eliminate the use and generation of hazardous substances. Green chemistry applies across the life cycle of a chemical product, including its design, manufacture, and use and includes 12 fundamental principles.
If your company’s products do not contain CoHCs, as defined by the CFP CoHC List, indicate this and attach a narrative summary describing how it ensures that the safest chemicals available are used. Note that you can check all that apply.

**Examples**

**Apparel and Footwear** Nike, Inc.’s “Green Chemistry Program” meets Response Options F5.2.a, b, c, d, and f. Nike “encourages all suppliers to use the Principles of Green Chemistry to inspire innovation... and asks that suppliers “commit to self-evaluate the use of toxic chemicals in their facility” and “validate their chemical greening efforts for materials or processes.”

**Option F5.2.a**

**Electronics** HP follows a precautionary approach to exploring alternatives to hazardous materials currently in use. HP incorporates the GreenScreen® for Safer Chemicals methodology and follows the National Academies of Science publication *A Framework to Guide Selection of Chemical Alternative*. The HP General Specification for the Environment (GSE) states that “when replacing substances, alternatives must have a lower potential impact on human health and the environment,” and “non-chemical alternatives should be considered first.”

**Retail** Target uses a definition for safer alternatives that aligns with the Green Chemistry & Commerce Council (GC3): “A safer alternative is a chemical that due to its inherent chemical and physical properties, exhibits a lower propensity to persist in the environment, accumulate in organisms and induce adverse effects in humans or animals, and delivers the functional performance required. A safer alternative can also include eliminating the need for the chemical through material change, product re-design, or product replacement; or by altering the functional demands for the product through changes in consumer demand, workplace organization, or product use.” Read the GC3 Joint Statement: [http://www.greenchemistryandcommerce.org/documents/RLC-JointStatement.pdf](http://www.greenchemistryandcommerce.org/documents/RLC-JointStatement.pdf)

**Option F5.2. b**

**Electronics** HP General Specification for the Environment (GSE) sets expectation and standards for suppliers and includes a section on Substance and Materials Requirements that provides information and tools on replacing substances and alternatives assessments. The GSE requires suppliers to replace substances with alternatives with a lower potential impact to human health and the environment based on the BizNGO materials selection principles. HP helps suppliers to identify preferable alternatives through their alternative materials assessment program when the use of hazardous chemicals is currently unavoidable. HP also points suppliers to several resources, which include the [OECD toolbox](http://www.greenchemistryandcommerce.org/documents/RLC-JointStatement.pdf), Interstate Chemicals Clearinghouse (IC) alternatives Assessment Guide, Chemsec Marketplace, EPA’s Safer Chemicals Ingredients List, SUBSPORT, and the GC3.

**Retail** Walmart supports the 12 Principles of Green Chemistry and encourages suppliers and manufacturers to make informed substitutions to mitigate, reduce, and eliminate potential hazards associated with product formulations. Walmart also supports alternatives assessment, “a process for identifying, comparing and selecting safer alternatives to Walmart Priority Chemicals (including those in materials, processes or technologies) on the basis of their hazards, performance, and economic viability.” Walmart compiled a list of resources for alternatives assessment and encourages suppliers to use such methods, databases and lists to reduce and eliminate Walmart Priority Chemicals using informed substitution.


[Walmart Sustainability Hub](http://www.greenchemistryandcommerce.org/documents/RLC-JointStatement.pdf)
Option F5.2.c
Companies may reward suppliers by giving preference to suppliers that seek safer alternatives, use preferred materials, or actively work to reduce or eliminate the use of hazardous substances.

Option F5.2.e

**Retail** As part of Walmart’s commitment to safer alternatives they established a goal to reduce the consumables chemical footprint of all Walmart U.S. and Sam’s Club U.S. stores by 10% by 2020. Walmart is committed to publicly sharing measurement progress through the Walmart Sustainability Hub website and through participation in the Chemical Footprint Project Survey. Improving the chemicals profile must be consistent with the Walmart definition for safer alternatives. [https://www.walmartsustainabilityhub.com/sustainable-chemistry/walmart-sustainable-chemistry-commitment](https://www.walmartsustainabilityhub.com/sustainable-chemistry/walmart-sustainable-chemistry-commitment)

Option F5.2.f


**Supporting documentation**
Provide a narrative summary of your company’s efforts to encourage the use of safer chemicals. To receive credit for option F5.2.f, provide a link to your company’s definition of safer alternative and how it is integrated into your company’s business practices. If you choose “yes” for question D2, this link will be included in your publicly available responses.