

# CHEMICAL FOOTPRINT PROJECT

2021 SURVEY RESULTS  
OUR SIXTH ANNUAL REPORT

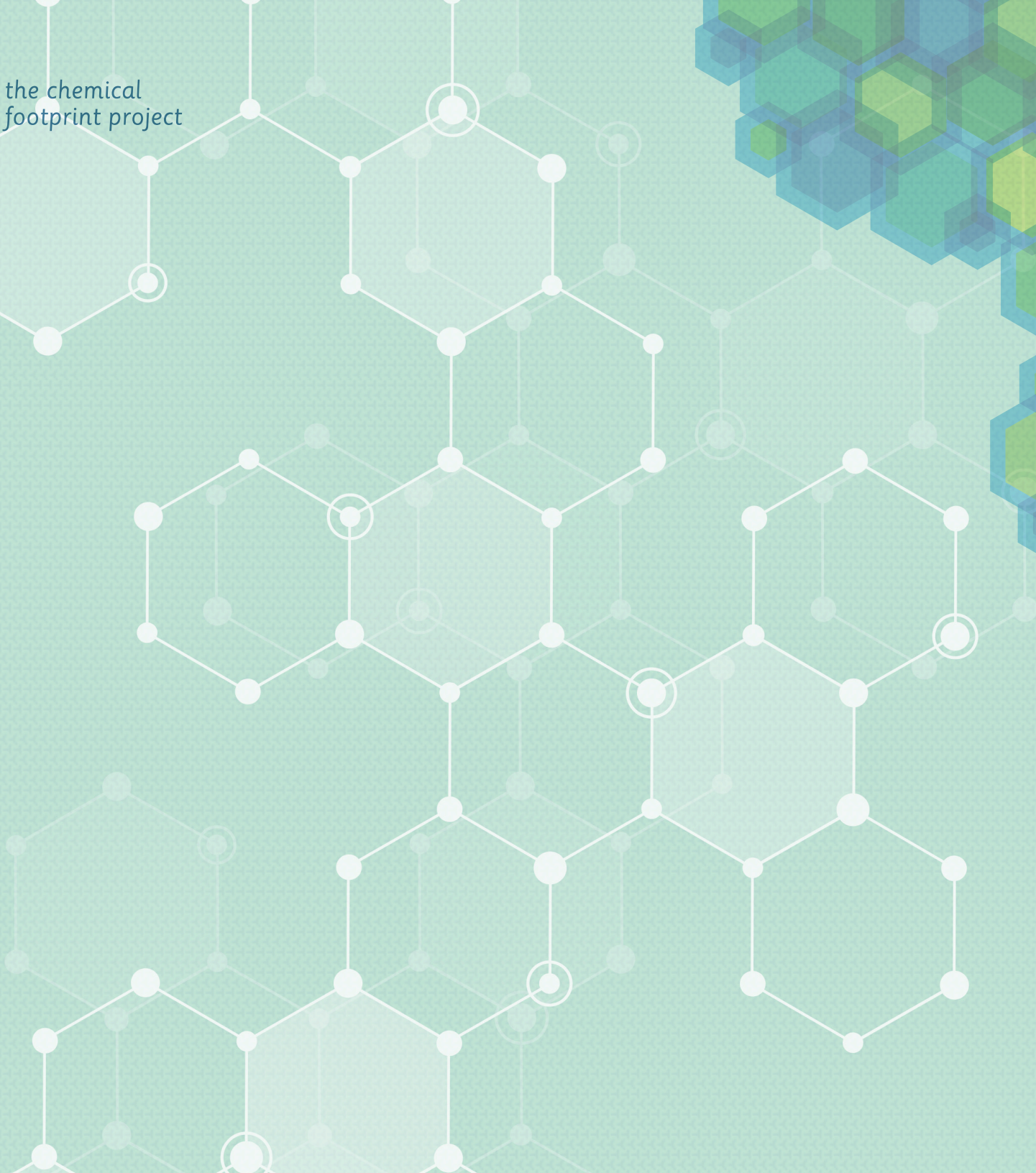
# SETTING BOLD CHEMICAL FOOTPRINT REDUCTION GOALS

cfp the chemical  
footprint project





cfp the chemical footprint project



# CONTENTS

## IN THIS REPORT YOU WILL FIND:

- 2. WELCOME TO THE 2021 CHEMICAL FOOTPRINT REPORT
- 3. NOW IS THE TIME FOR BOLD CHEMICAL FOOTPRINT REDUCTION GOALS
- 6. INVESTORS SEEK DISCLOSURE OF HOW COMPANIES MANAGE CHEMICAL RISKS
- 7. SIGNATORIES TO THE CHEMICAL FOOTPRINT PROJECT (CFP)
- 8. CFP SURVEY & CHEMICAL FOOTPRINT METRIC: INTRODUCTION
- 10. RESPONDERS TO THE 2021 CFP SURVEY
- 11. 2021 CFP SURVEY RESULTS
- 14. CHEMICAL INVENTORY PILLAR (I)
- 15. RSLs/MRSLs/PRIORITY CHEMICAL LISTS FROM CFP RESPONDERS
- 16. MANAGEMENT STRATEGY PILLAR (M)
- 17. EXAMPLES OF COMPREHENSIVE CHEMICALS POLICIES: HP AND WALMART
- 17. ACCOUNTABILITY MEASURES – QUESTION M4
- 18. FOOTPRINT MEASUREMENT PILLAR (F)
- 18. CHEMICAL FOOTPRINT REDUCTION GOAL – QUESTION F1
- 19. CHEMICAL FOOTPRINT MEASUREMENT – QUESTION F2
- 19. CHEMICAL FOOTPRINT CHANGE – QUESTION F3
- 20. SAFER ALTERNATIVES – QUESTION F5
- 21. DISCLOSURE & VERIFICATION PILLAR (D)
- 22. TAKE ACTION



# WELCOME

## Welcome to the 6th Chemical Footprint Project (CFP) report.

CFP is a program of Clean Production Action and was co-founded by the Lowell Center for Sustainable Production at the University of Massachusetts Lowell, the consultancy Pure Strategies, and Clean Production Action.

CFP includes two major initiatives for identifying and moving away from the use of chemicals of high concern (CoHCs) towards safer solutions. One initiative is the **CFP Survey**, a holistic assessment of where an organization is in its efforts to move beyond regulatory compliance towards best practices in chemicals management. The other initiative is the **chemical footprint metric**, a quantitative measure of the production and use of CoHCs. The chemical footprint metric is embedded into the CFP Survey and provides a means for companies to set goals, quantify their use of CoHCs, and measure progress.

### In this report you will find:

- **WHY** now is the time to set bold goals for chemical footprint reductions.
- **WHY** investors want companies to disclose their chemical risks and how they advocate for greater transparency.
- **WHO** the CFP Signatories are.
- **AN OVERVIEW** of the CFP Survey and the Chemical Footprint Metric.
- **WHO** participated in the 2021 CFP Survey.
- **THE 2021 CFP SURVEY RESULTS.** This part of the document includes the steps to best practices in chemical safety, who the CFP Frontrunners and Disclosure Leaders are, and examples of best practices in chemicals management across the four pillars of the CFP Survey.
- **HOW** to take action and join the movement towards chemical footprint reduction.

Now is the time to action to meet the UN Sustainable Development Goals of Good Health and Well-Being (Goal 3), Clean Water and Sanitation (Goal 6), and Sustainable Consumption and Production (Goal 12). Chemical footprint reductions and safer solutions are critical to achieving these goals.

## HIGHLIGHTS FROM THE 6TH CFP REPORT

- Companies with over \$1 trillion in annual revenue from seven business sectors participated in the 2021 CFP Survey. Over one year, they reported chemical footprint reductions of 83.4 million pounds/37.8 million kilograms.
- Walmart, one of the world's largest retailers, surpassed its 10% chemical footprint reduction goal in formulated products by achieving a 17% reduction and encouraged suppliers to set impactful chemical footprint goals.
- Reckitt, a major consumer goods company and retailer supplier with brands including Lysol, Woolite, and Calgon, announced it is "aiming for a 65% reduction in our chemical footprint by 2030."
- CFP Signatories including investors and retailers established the CFP Survey as a leadership framework in shareholder resolutions and benchmarking assessments.
- The US Securities and Exchange Commission (SEC) in its new proxy voting disclosure requirements for institutional investment managers listed "chemical footprint" among examples for "Environment or climate" reporting requirements.





# NOW IS THE TIME FOR BOLD CHEMICAL FOOTPRINT REDUCTION GOALS

**IF HUMANITY IS TO REDUCE THE EVER-INCREASING HARM** caused by chemical pollution to people and the planet, businesses and governments need to set and implement bold goals to reduce their chemical footprint. Scientific studies documenting the widespread evidence that chemical pollution is reaching a tipping point and threatening the stability of global ecosystems essential to humanity continue to grow. We are now at a critical inflection point and need a paradigm shift to accelerate the transition to greener, safer, healthier, and more sustainable chemicals, materials, and products.

Persson et al., in their article titled, “Outside the Safe Operating Space of the Planetary Boundary for Novel Entities,” concluded that “novel entities” now exceed the planetary boundary. “Novel entities” refers to “chemicals and other new types of engineered materials or organisms not previously known to the Earth systems as well as naturally occurring elements (for example, heavy metals) mobilized by anthropogenic activities.” The authors of the study concluded that:

“**The increasing rate of production and releases of larger volumes and higher numbers of novel entities with diverse risk potentials exceed societies’ ability to conduct safety related assessments and monitoring. We recommend taking urgent action to reduce the harm associated with exceeding the boundary by reducing the production and releases of novel entities, noting that even so, the persistence of many novel entities and/or their associated effects will continue to pose a threat.**”<sup>1</sup>

Studies and reports continue to highlight the harm associated with exceeding the planetary boundary for novel entities, especially chemical pollution. For example, the recent United Nations (UN) report, The Right to a Clean, Healthy and Sustainable Environment, noted that the “production of chemicals doubled between 2000 and 2017, and is expected to double again by 2030 and triple by 2050,” resulting in “hundreds of millions of tons of toxic substances released into air, water and soil annually.”<sup>2</sup>

Toxic chemicals, such as the per- and polyfluoroalkyl substances (PFAS), known as the “forever chemicals,” now have contaminated the entire planet, even remote areas in the Himalayas and Pacific and Atlantic oceans.<sup>3</sup> A recent article by Cousins, et al., concluded that the global spread of four perfluoroalkyl acids (PFAAs), a subset of PFAS, “in the atmosphere has led to the planetary boundary for chemical pollution being exceeded.”<sup>4</sup>

## TAKE ACTION

- **BRANDS, RETAILERS, & MANUFACTURERS**

- commit to reducing your chemical footprint by at least 50% by 2030
- participate in the 2023 CFP Survey [chemicalfootprint.org](https://chemicalfootprint.org)



- **INVESTORS:** sign on as a CFP Signatory [chemicalfootprint.org/value/be-a-signatory](https://chemicalfootprint.org/value/be-a-signatory) and join the Investor Environmental Health Network [iehn.org](https://iehn.org)
- **PURCHASERS & NGOS:** sign on as a CFP Signatory [chemicalfootprint.org/value/be-a-signatory](https://chemicalfootprint.org/value/be-a-signatory)
- **All:** participate in the BizNGO Chemicals Management Work Group [bizngo.org/safer-chemicals](https://bizngo.org/safer-chemicals)

*chemical pollution is one of the three planetary crises confronting humanity along with climate change and biodiversity loss*



**“THE BOLD GOAL FOR CHEMICAL FOOTPRINT REDUCTION IS ZERO AS SOON AS POSSIBLE.”**

PFAS and other toxic chemicals cause significant adverse health effects to people across the planet. For example, “pollution and toxic substances cause at least 9 million premature deaths, double the number of deaths inflicted by the COVID-19 pandemic during its first 18 months.”<sup>5</sup>

For these reasons, chemical pollution is one of the three planetary crises confronting humanity along with climate change and biodiversity loss.<sup>6</sup> The chemical industry and chemical pollution, in turn, exacerbate climate change and biodiversity. In terms of climate change, the chemical industry itself is a significant consumer of fossil fuels, more than 10 percent of fossil fuels produced globally, and emitter of greenhouse gas emissions, an estimated 3.3 billion tons annually.<sup>7</sup> In terms of biodiversity loss, pollution and toxic substances are “one of the five main drivers of the catastrophic decline in biodiversity, with particularly negative impacts on pollinators, insects, freshwater and marine ecosystems (including coral reefs) and bird populations.”<sup>8</sup>

In summary, the presence of hazardous chemicals in the environment and the resulting exposures to these substances are disrupting the stability of the planetary environment that sustained humanity for the past 10,000 years. Society passed the planetary boundary for hazardous chemicals and needs to bend the curve of production and use down immediately, especially to meet the Sustainable Development Goals (SDGs) by 2030, including:

- **Goal 3 — Good Health and Well-Being, Target 3.9:** substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination.
- **Goal 6 — Clean Water and Sanitation, Target 6.3:** by 2030, improve water quality by reducing pollution, eliminating dumping, and minimizing the release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.
- **Goal 12 — Sustainable Consumption and Production, Target 12.4:** achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water, and soil to minimize their adverse impacts on human health and the environment.

Given the overwhelming weight of evidence of harm caused by the production, use, disposal, and resultant exposure to hazardous chemicals, which are antithetical to achieving SDGs 3, 6, and 12, we conclude that **the bold goal for chemical footprint reduction is zero as soon as possible. Significant chemical footprint reductions are needed by 2030 to progress towards SDGs 3, 6, and 12. We encourage businesses to set chemical footprint reduction goals of at least 50% by 2030 and zero by 2040.**

Zero production and use of what the Chemical Footprint Project (CFP) defines as chemicals of high concern, or CoHCs, is the goal because:

- Substances that are a combination of persistent (P), bioaccumulative (B), mobile (M), or toxic — including persistent, bioaccumulative, and toxic (PBT); very persistent and very bioaccumulative (vPvB); very persistent and toxic (vPT); very bioaccumulative and toxic (vBT); persistent, mobile, and toxic (PMT); very persistent and very mobile (vPvM) — pose insurmountable management problems across their lifecycles. Any amount in the environment matters when a substance: persists in the environment because it degrades very slowly; bioaccumulates in organisms and biomagnifies up the food chain; is mobile through the soil, thereby making it more likely to leach to groundwater or runoff into lakes and rivers; and/or is toxic to people or the environment.
- For carcinogens there is no safe threshold: “For substances that are genotoxic and carcinogenic, the traditional assumption is that there may not be a threshold dose and that some degree of risk may exist at any level of exposure.”<sup>9</sup>
- For endocrine-disrupting chemicals (EDCs) the thresholds of adversity can be very low or absent during early development.<sup>10</sup>

**“SIGNIFICANT CHEMICAL FOOTPRINT REDUCTIONS ARE NEEDED BY 2030 TO PROGRESS TOWARDS SDGS 3, 6, AND 12. WE ENCOURAGE BUSINESSES TO SET CHEMICAL FOOTPRINT REDUCTION GOALS OF AT LEAST 50% BY 2030 AND ZERO BY 2040.”**



Governments are increasingly calling for and setting zero production and use goals for CoHCs. For example, The Stockholm Convention on Persistent Organic Pollutants (POPs) passed in 2001, exemplifies global alignment to the need to protect human health and the environment by eliminating the production and use of substances that are persistent, are bioaccumulative, have the potential for long-range environmental transport, and are toxic. More recently, the European Commission in its *Chemicals Strategy for Sustainability towards a Toxic-Free Environment* set goals of:

- Zero for toxic chemicals in consumer products, which include food packaging, toys, childcare products, cosmetics, detergents, furniture, and textiles. Toxic chemicals include those that cause cancers, gene mutations, affect the reproductive or endocrine system, or are persistent and bioaccumulative.<sup>11</sup>
- The elimination of PFAS with exceptions for essential uses: PFAS “require special attention, considering the large number of cases of contamination of soil and water — including drinking water — in the EU and globally, the number of people affected with a full spectrum of illnesses and the related societal and economic costs. That is why the Commission proposes a comprehensive set of actions to address the use of and contamination with PFAS. Those aim to ensure, in particular, that the use of PFAS is phased out in the EU, unless it is proven essential for society.”<sup>12</sup>

Companies are using CFP’s definition of a chemical footprint to measure progress towards a zero chemical footprint. CFP defines the **Chemical Footprint of an organization that sells tangible products as the total mass of chemicals of high concern (CoHCs) in:**

1. **products sold,**
2. **manufacturing operations,** for example, solvents used to clean parts in a manufacturing process, but do not become part of the product or are not intended to become part of the product,
3. **facilities’ maintenance and upkeep,** for example, cleaning floors in a building,
4. **packaging,** and
5. **suppliers’ manufacturing operations.**

The chemical footprint of organizations that do not sell tangible products is the total mass of CoHCs in products purchased. For example, see the Chemical Footprint of Products Commonly Used in Pediatrics report by Clean Production Action.<sup>13</sup>

As detailed below, companies participating in the CFP Survey demonstrate the actions that need to be taken to measure and reduce their chemical footprints.

## DEFINITIONS...

**Chemical footprint:** total mass of chemicals of high concern (CoHCs) used by an event, organization, service, building, or product.

**Chemical footprint of an organization:** total mass of chemicals of high concern (CoHCs) in products sold by a company; used in its manufacturing operations, facilities, and by its suppliers; and contained in packaging.

**Chemicals of High Concern (CoHCs):** A carcinogen, mutagen, or developmental/reproductive toxicant; persistent, bioaccumulative (vPvB); or any other chemical for which there is scientific evidence of probable serious effects to human health or the environment that gives rise to an equivalent level of concern — such as endocrine disruption or neurotoxicity — or a chemical whose breakdown products result in a CoHC that meets any of the above criteria.



# DISCLOSURE

## INVESTORS SEEK DISCLOSURE OF HOW COMPANIES MANAGE CHEMICAL RISKS

How companies manage the reputational and regulatory risks of toxic chemicals in products, manufacturing, and supply chains is typically opaque. Very few companies publicly disclose how they manage chemicals beyond legal requirements, despite the increasing regulatory and reputational risks posed by toxic chemicals in products, manufacturing operations, and supply chains. Regulatory risks for toxic chemicals are rising rapidly as the European Union and state governments in the U.S. restrict toxic chemicals in products. For example, in the “US there are now 289 policies in 38 states, setting restrictions on the use of toxic chemicals in products.”<sup>14</sup> In Europe, as highlighted above, the new Chemicals Strategy calls for eliminating all toxic chemicals in consumer products and phasing out all PFAS uses (with exceptions for essential uses).

Reputational risks include finding toxic chemicals, such as PFAS, in products, especially consumer goods. For example, in 2022, three apparel brands were called out for PFAS in their products: “LulaRoe, Lululemon, and Old Navy were among the brands that tested positive for PFAS.”<sup>15</sup> In an interview with *Responsible Investor*, Susan Baker, director of shareholder advocacy at Trillium Asset Management, noted that “there’s clear reputational risk if hazardous chemicals are found in some of their branded products.” Susan addressed this issue when speaking of shareholder resolutions filed with Costco and Disney that asked the firms to publish quantitative and qualitative data on how they are eliminating chemicals of concern.<sup>16</sup>

While the **Sustainability Accounting and Standards Board (SASB)** has set key performance indicators (KPIs) for reporting on chemicals and materials of concern across sectors,<sup>17</sup> very few companies report to those KPIs and standard reporting requirements on how to report to SASB’s KPIs are lacking.

The result, investors are asking companies to disclose how they manage chemical risks:

“Chemicals management poses material risks to companies, and to their investors,” noted Larisa Ruoff, Director of Shareholder Advocacy, The Sustainability Group of Loring, Wolcott & Coolidge. “Shareholders should have access to clear, comparable information on how companies are managing these risks. This is why investors are asking companies to measure, reduce and disclose their chemical footprints—just as they are doing for their carbon footprints,” concluded Ruoff.<sup>18</sup>

Increasingly asset managers in the Investor Environmental Health Network, a program of Clean Production Action, are utilizing shareholder resolutions to increase corporate transparency on chemicals management practices. For example:

- **Dollar General:** “Shareholders request that the company reduce its chemical footprint by adopting new policies.”<sup>19</sup>
- **Burlington Stores:** Shareholders request a report “describing if, and how, it plans to reduce its chemical footprint.”<sup>20</sup>
- **Bed Bath & Beyond:** Shareholders request a report “on the outcomes of the Company’s chemical reduction efforts by publishing quantitative and qualitative data on progress to eliminate the use of chemicals of concern.”<sup>21</sup>
- **McDonald’s:** Shareholders request a report “on the potential public health and/or environmental impacts of toxic materials used in food contact settings.”<sup>22</sup>

Acknowledging the growing requests for reporting on chemical footprints, the US Securities and Exchange Commission (SEC) in its new proxy voting disclosure requirements for institutional investment managers listed “chemical footprint” among examples for “Environment or climate” reporting requirements. The SEC now requires among its proxy voting disclosure requirements the reporting of “All categories applicable to the matter voted on from the following list of categories,” including “Environment or climate (examples: greenhouse gas (GHG) emissions, transition planning or reporting, biodiversity or ecosystem risk, **chemical footprint** [*emphasis added*], renewable energy or energy efficiency, water issues, waste or pollution, deforestation or land use, say-on-climate, environmental justice).”<sup>23</sup>

**THE TREND IS CLEAR, INVESTORS WANT TO KNOW WHERE COMPANIES STAND IN THEIR CHEMICALS MANAGEMENT PRACTICES BEYOND LEGAL REQUIREMENTS.**





# CFP SIGNATORIES

Investors, health care organizations, non-governmental organizations (NGOs), governments, and retailers want to know where companies are on their chemicals management journey. Signatories to CFP encourage companies in their sphere of influence to reduce their chemical footprint and participate in the CFP Survey, and provide feedback to Clean Production Action on how to improve the Survey. Become a Signatory at [chemicalfootprint.org/value/be-a-signatory](https://chemicalfootprint.org/value/be-a-signatory).

## Health Care, Retail, & NGO Signatories

American Sustainable Business Council (ASBC)  
 Blue Cross Blue Shield of Massachusetts  
 ChemSec  
 CommonSpirit Health  
 Credo Beauty  
 CVS Health  
 Dollar Tree  
 Edward-Elmhurst Healthcare  
 Environmental Defense Fund  
 Fairview Health Services  
 Geisinger Health System  
 Hackensack Meridian Health  
 Inova Health Systems  
 Interfaith Center on Corporate Responsibility (ICCR)  
 Kaiser Permanente  
 Mind the Store Campaign  
 Partners Healthcare  
 Premier, Inc.  
 Rite Aid  
 SAHTECH  
 Safer Chemicals, Healthy Families

San Francisco Department of Environment  
 St. Joseph Health  
 Staples  
 Target Corporation  
 The Rose Foundation for Communities and the Environment  
 Trinity Health  
 University of Cantabria  
 University Hospitals  
 Vizient, Inc.  
 Walmart  
 Whole Foods Market  
 Zero Discharge of Hazardous Chemicals (ZDHC)

## CFP Investor Signatories

Adrian Dominican Sisters  
 Advocate Health Care  
 Anne Arundel Medical Group  
 Arjuna Capital  
 As You Sow Foundation

Athens Impact Socially Responsible Investments  
 Australian Ethical Investment  
 Aviva Investors  
 Bank J. Safra Sarasin Ltd.  
 Boston Common Asset Management  
 Calvert Research & Management  
 Carnegie Investment Counsel  
 Christopher Reynolds Foundation  
 Clean Yield Asset Management  
 Daughters of Charity, Province of St. Louise  
 Domini Impact Investments  
 Dominican Sisters of Hope  
 Everence and the Praxis Mutual Funds  
 Figure 8 Investment Strategies  
 First Affirmative Financial Network  
 Green Century Capital Management  
 Harrington Investments  
 Impax Asset Management  
 Investor Voice  
 JLens Investor Network  
 Legal & General Investment Management  
 Maryknoll Sisters

Mercy Health  
 Mercy Investment Services  
 Miller/Howard Investments  
 Natural Investments  
 Newground Social Investment  
 NorthStar Asset Management  
 Northwest Coalition for Responsible Investment  
 Parnassus Investments  
 Rhode Island Treasury  
 Signity Financial  
 Sisters of St. Francis of Philadelphia  
 Sonen Capital  
 The Sustainability Group of Loring, Wolcott and Coolidge  
 Trillium Asset Management  
 Ursuline Sisters of Tildonk  
 Walden Asset Management  
 WHEB Asset Management  
 Zevin Asset Management

**INVESTOR SIGNATORIES REPRESENT OVER \$2 TRILLION IN ASSETS UNDER MANAGEMENT AND PROCUREMENT SIGNATORIES REPRESENT OVER \$800 BILLION IN PURCHASING POWER.**



# INTRODUCTION

## TO THE CFP SURVEY AND CHEMICAL FOOTPRINT METRIC



The **Chemical Footprint Project (CFP) Survey** is a holistic assessment of an organization’s journey beyond regulatory compliance towards best practices in chemicals management. The Survey assesses organizations on four pillars of chemicals management:

- **Management Strategy:** evaluates the scope of corporate chemicals policies and their integration into business strategy, accountability, and employees’ incentives for safer chemical use, as well as the company’s external advocacy for safer chemical use.
- **Chemical Inventory:** evaluates the efforts a company makes to identify chemicals of high concern (CoHCs) in its products, the extent of chemical data collected from its suppliers, and its systems for managing chemical data and ensuring supplier compliance with its reporting requirements.
- **Footprint Measurement:** evaluates the goals that a company sets to reduce chemicals of high concern, its efforts to establish a baseline chemical footprint and measure progress, and its process for assessing and implementing safer alternatives.
- **Disclosure and Verification:** evaluates the extent to which a company publicly discloses the chemicals in its products beyond regulatory requirements, discloses its score and its answers to the CFP Survey questions, and whether a third party independently verified its Survey answers.

Across the four pillars are 19 questions worth a total of 103 points (see Table 1 below). Each question has multiple response options tiered from initial steps beyond compliance to best practices of leaders in the field.<sup>24</sup>

TABLE 1.  
CFP 2021 Survey: Question Topics by Pillar (points per question)

CHEMICAL INVENTORY (I) 30 points			MANAGEMENT STRATEGY (M) 20 points			FOOTPRINT MEASUREMENT (F) 33 points			DISCLOSURE & VERIFICATION (D) 20 points		
#	Topic	Points	#	Topic	Points	#	Topic	Points	#	Topic	Points
I 1	Restricted Substances List (RSL) / Manufacturing RSL	5	M 1	Chemicals policy	8	F 1	Footprint reduction goal	6	D 1	Chemical ingredients	8
I 2	RSL/MRSL Compliance	5	M 2	Business strategy	4	F 2	Footprint measurement	8	D 2	CFP responses	3
I 3	Data collection	5	M 3	External engagement	4	F 3	Footprint change	10	D 3	CFP score	5
I 4	Full chemical ingredient information	5	M 4	Accountability	4	F 4	Hazard assessment	3	D 4	Verification	4
I 5	Data management	5				F 5	Safer alternatives	6			
I 6	Supplier conformance	5									

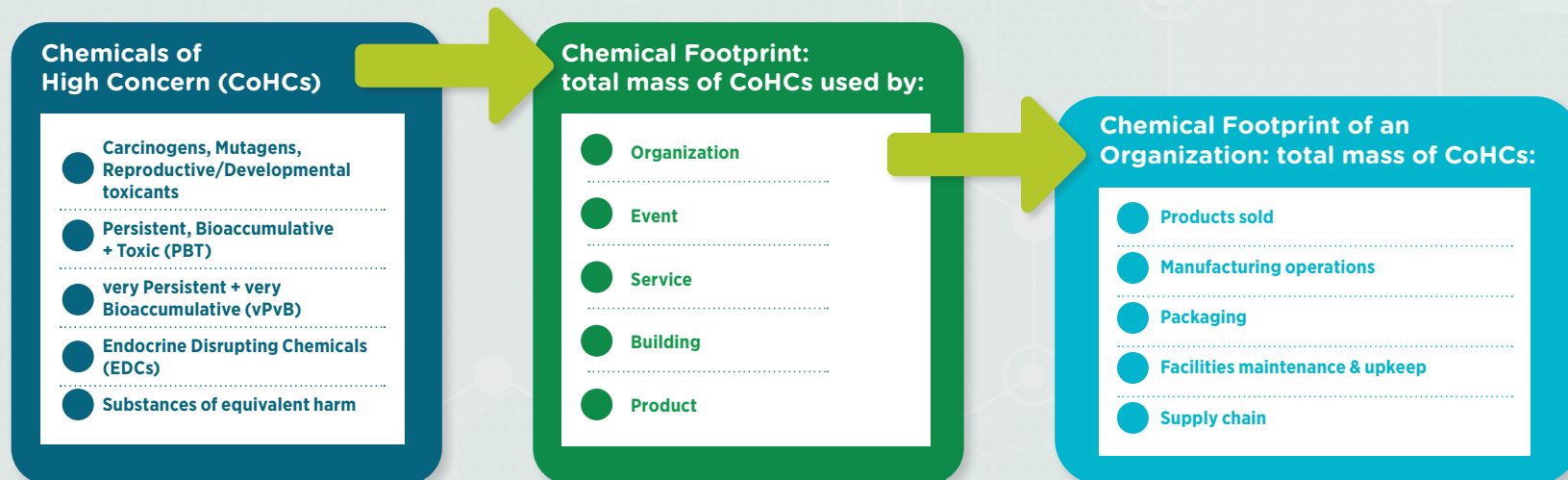




**The chemical footprint metric** measures the production and use of chemicals of high concern to people and the planet. Core definitions critical to measuring a chemical footprint is the definitions of: 1) “chemical of high concern (CoHC);” 2) “chemical footprint;” and 3) “chemical footprint of an organization” (see the “Definitions” box on page 5). Figure 1 below illustrates how these definitions build upon and interconnect with each other. CoHCs define a chemical footprint. A chemical footprint can be measured at different units of analysis. One of those units of analysis is an “organization,” which is the focus of the CFP Survey.

Questions F2 and F3 in the CFP Survey ask companies about chemical footprint measurement and progress in reducing chemical footprints. The CFP Survey specifies the chemicals for footprint measurement in the CFP CoHC Reference List.<sup>25</sup> The chemicals on the CFP CoHC Reference List meet the criteria of the CFP definition of CoHC and are identified using the GreenScreen® chemical hazard assessment methodology. Specifically, CFP CoHC Reference List chemicals are GreenScreen® Benchmark-1 and List Translator-1 chemicals.<sup>26</sup>

FIGURE 1.  
Core Components of Measuring the Chemical Footprint of an Organization





# HIGHLIGHTS FROM THE 6TH ANNUAL CFP SURVEY

## List of Responders

### Building Products & Furnishings:

Andersen Corporation, Herman Miller, Inc., HNI Corporation, Naturepedic Organic Mattresses & Bedding, Shaw Industries

### Chemical / Pharmaceutical:

Anonymous (2)

### Household & Personal Products:

Anonymous (1), Beautycounter, Clorox, Colgate-Palmolive, Ecolab, GOJO Industries, Inc., Insignem Pte Ltd, Procter & Gamble, Reckitt Benckiser (Reckitt)

### Medical Equipment & Suppliers:

BD, Case Medical, Stryker Corporation

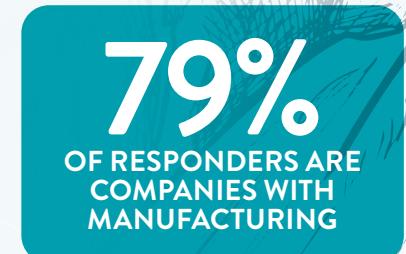
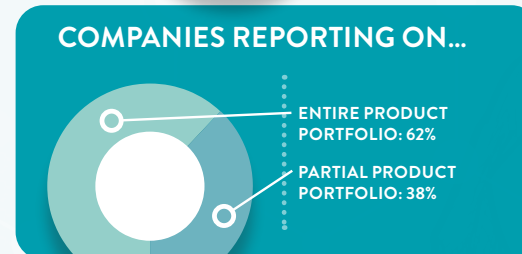
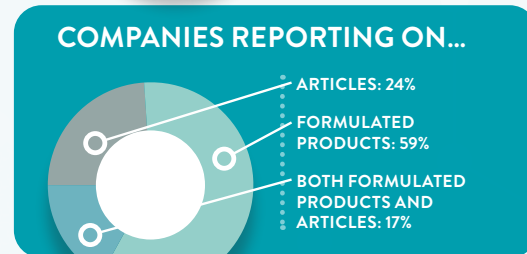
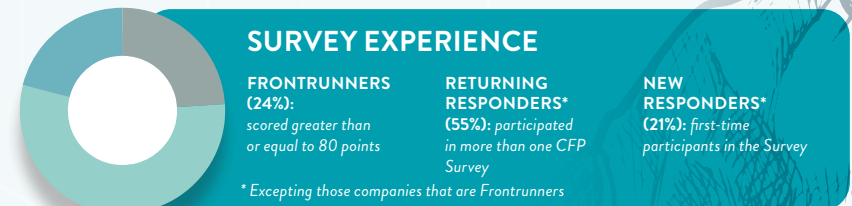
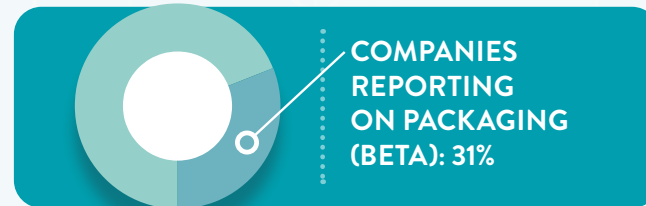
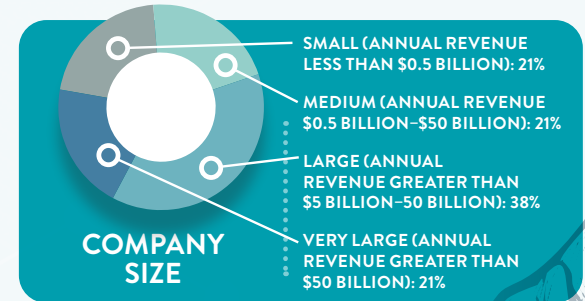
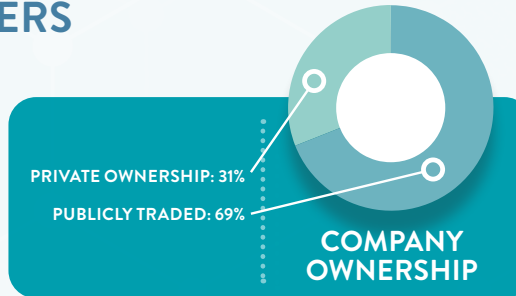
### Retail:

Ahold Delhaize USA, ALDI, Dollar Tree, Grove Collaborative, Rite Aid, Target, Walmart, Whole Foods

### Technology:

HP Inc. Hasbro, Inc.

## SURVEY RESPONDERS BY THE NUMBERS





**SUMMIT**  
BEST PRACTICES IN  
CHEMICALS MANAGEMENT



**Frontrunners scored 80 or more points on the survey**

100 points

DISCLOSURE & VERIFICATION

FOOTPRINT MEASUREMENT

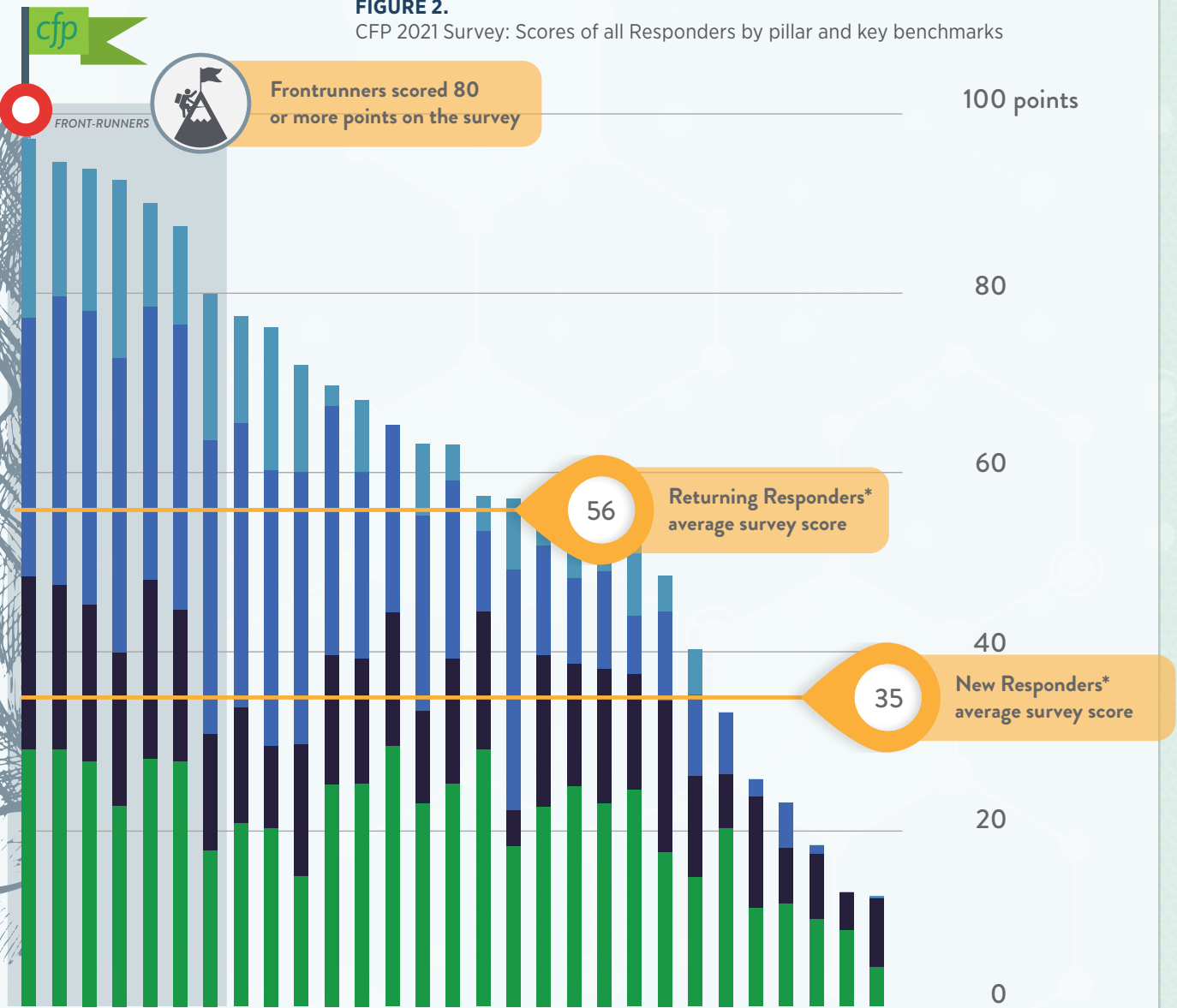
MANAGEMENT STRATEGY

CHEMICAL INVENTORY

**BASE CAMP**  
REGULATORY COMPLIANCE

**FIGURE 2.**

CFP 2021 Survey: Scores of all Responders by pillar and key benchmarks



56

Returning Responders\*  
average survey score

35

New Responders\*  
average survey score

\*Excluding frontrunners





## 2021 RESULTS

# EXAMINING THE SURVEY RESULTS: HOW OUR FRONTRUNNERS ARE DEFINING BEST PRACTICES IN CHEMICAL SAFETY

**Frontrunners** were the seven companies that scored 80 or more points out of the total 103 points in the 2021 Survey. They were a mix of New and Returning Responders. Frontrunners are future-proofing their organizations by developing and implementing chemical policies, practices, and procedures that go far beyond regulatory compliance, and therefore stay ahead of new regulations and consumer demands. **The Frontrunners from 2021 CFP Survey were Beautycounter, Case Medical, Herman Miller, HP, Insignem, Naturepedic, and Reckitt.**

The Frontrunners represented a mixture of small, medium, and large businesses selling articles and/or formulated products in four sectors:

- Building products and furnishings (articles): **Herman Miller** and **Naturepedic**
- Household and personal care products (formulated products): **Beautycounter**, **Insignem**, and **Reckitt**
- Medical equipment and supplies (articles and formulated products): **Case Medical**
- Technology (articles and formulated products): **HP**

Frontrunners scored significantly higher on average than Returning Responders and New Responders across all four pillars (see Figures 2 and 3).

**Returning Responders** were the 17 companies that participated in more than one CFP Survey and were not a Frontrunner. They averaged 56 points overall.

**New Responders** were the five companies that participated in the CFP Survey for the first time and were not a Frontrunner. They averaged 35 points overall.

New and Returning Responders scored highest on the Chemical Inventory and Management Strategy Pillars, lower on Footprint Measurement, and lowest on Disclosure & Verification. New and Returning Responders scored in parallel across



OUR 2021 FRONTRUNNER  
AWARD WINNERS



Insignem



BEAUTYCOUNTER®



Case Medical



most questions in the Survey, with Returning Responders generally scoring higher (see Figure 4).

New and Returning Responders scored on average the highest for Chemical Inventory followed by Management Strategy and Footprint Measurement, and the lowest for Disclosure & Verification. Frontrunners on the other hand scored highest for Footprint Measurement, followed by Management Strategy and Chemical Inventory, and lowest for Disclosure & Verification. Frontrunners scored highly across the entire Survey, with their highest score in Footprint Measurement indicating a clear organizational commitment to chemical and product safety.

**Disclosure Leaders** were the 10 companies that agreed to publicly disclose their CFP responses (Question D2) and CFP score (Question D3). CFP created the Disclosure Leader award to recognize companies that overcome the challenges of publicly sharing their chemical safety journey by disclosing both their responses and score on the CFP website at [chemicalfootprint.org/results/disclosure-leaders](https://chemicalfootprint.org/results/disclosure-leaders). The ten Disclosure Leaders from the 2021 Survey were: **Beautycounter, BD, Case Medical, GOJO, Grove Collaborative, Herman Miller, HP, Insignem, Naturepedic, and Walmart** (see Disclosure & Verification Pillar).

## STEPS TO BEST PRACTICES IN CHEMICAL SAFETY

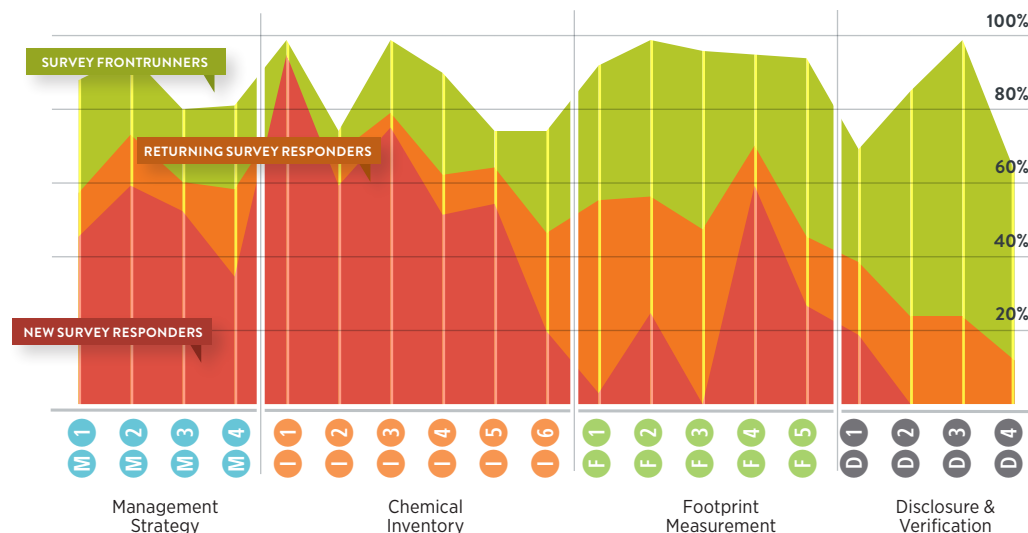
The 2021 CFP Survey results revealed how companies move from the first steps beyond regulatory compliance to best practices:

- Create a restricted substances list (RSL) or manufacturing RSL (MRSL).
- Know the chemicals in products and engage suppliers (Chemical Inventory Pillar).
- Develop company-wide chemicals management policies and practices beyond regulatory compliance (Management Strategy Pillar).
- Demonstrate action and change with chemical footprint goals, measurement, and reductions, and safer solutions (Footprint Measurement Pillar).
- Be transparent (Disclosure & Verification Pillar).

FIGURE 3. CFP 2021 Survey: New Responders, Returning Responders, and Frontrunners average scores for each pillar and all four pillars combined (percent of possible points scored)



FIGURE 4. CFP 2021 Survey: New Responders, Returning Responders, and Frontrunners average scores for each question in the Survey (percent of possible points scored)





2021 RESULTS

# THE CHEMICAL INVENTORY PILLAR (I)

## RSLs/MRSLs WERE THE MOST POPULAR ACTION IN THE SURVEY

In the 2021 CFP Survey, almost all responders had a restricted substances list (RSL) for chemicals in products or a manufacturing RSL (MRSL) for chemicals used in manufacturing operations (Question I1). In fact, RSLs/MRSLs were the highest scoring response in the Survey. Responders to the 2021 Survey scored higher for Question I1 than for any other question in the Survey with 92% of total points achieved (see Figure 4, Question I1).

An RSL/MRSL is a list of chemicals companies do not allow in products/manufacturing operations above a certain threshold. Suppliers are required to meet the RSL/MRSL criteria. Companies also create other lists of chemicals they recommend, but do not require, suppliers to eliminate. These lists can go by different names, such as a “priority chemical list” or “watch list.” See model examples of comprehensive RSLs, MRSLs, and priority chemical lists from CFP Responders on the next page.

Beyond Question I1, the higher scores in the Chemical Inventory Pillar for New and Returning Responders in comparison to other Pillars in the Survey, highlighted how taking action to know chemicals in products and engage suppliers in disclosing chemical ingredient information are common initial steps beyond RSLs. Based on the average scores of New and Returning Responders from highest to lowest in the Chemical Inventory Pillar, companies prioritized Data Collection (Question I3), followed by RSL/MRSL Compliance (Question I2), Data Management (Question I5), and Full Chemical Ingredient Information (Question I4), with a steeper drop-off in activities concerning Supplier Conformance (Question I6) (see Figure 4).

A critical action in the Chemical Inventory Pillar is Collecting Full Chemical Ingredient Information (Question I4). In addition, companies need to know the chemicals in their products to calculate their chemical footprint (Question F2). Frontrunners scored high for both Questions I4 and F2, while New Responders and Returning Responders scored much lower for I4 and for F2 (see Figure 5).

## COMPANIES NEED TO KNOW THE CHEMICALS IN THEIR PRODUCTS TO CALCULATE THEIR CHEMICAL FOOTPRINT.

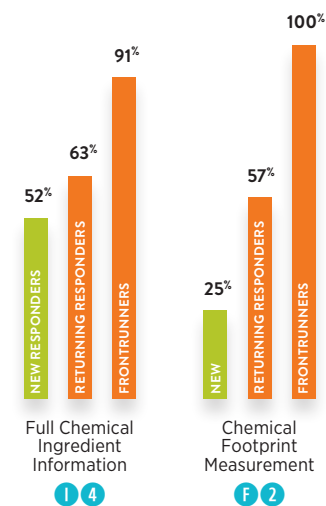


FIGURE 5. CFP 2021 Survey Scores: New Responders, Returning Responders, and Frontrunners for Full Chemical Ingredient Information (Question I4) and Chemical Footprint Measurement (Question F2) (percent of total points achieved for each question)

## BEST PRACTICES, CHEMICAL INVENTORY

## RSLs/MRSLs/PRIORITY CHEMICAL LISTS (QUESTION 11)

## MODEL EXAMPLES OF COMPREHENSIVE RSLs, MRSLs, AND PRIORITY CHEMICAL LISTS FROM CFP RESPONDERS

**Beautycounter:** “we’ve committed to a health and safety standard that goes well beyond what is legally required in the United States. The Never List™ is made up of more than 1,800 questionable or harmful chemicals that we never use as ingredients in our products. This includes the over 1,400 chemicals banned or restricted in personal care products by the European Union, plus additional chemicals screened by Beautycounter and found to be of concern.” Chemical classes include: coal tar ingredients, ethanolamines, parabens, phthalates, polyethylene glycol (PEG) compounds, and synthetic fragrances or flavorings.

**Herman Miller:** “we are focused on removing chemicals of concern from our products and ensuring they are not used in our new products. To do this, we have developed a Herman Miller Restricted List of Chemicals based on voluntary building standards, product certifications, and applicable regulations.” Chemicals and chemical classes prioritized for elimination include: antimicrobials, formaldehyde, halogenated flame retardants, heavy metals and heavy metal compounds, methylene chloride, organotins, perfluorinated compounds, phthalate plasticizers, and polyvinyl chloride (PVC) plastic.

**Naturepedic:** Does not use flame barriers, flame retardants, formaldehyde, pesticides, phthalates, polyurethane foam, and PVC; and meets standards that have RSLs, including: Global Organic Textile Standard (GOTS), Made Safe, and GreenGuard® Gold.

**HP’s Standard 011 General Specification for the Environment** lists restricted chemicals by product type and includes reference(s) for the listing. References include: European Union regulations, California Proposition 65, U.S. Toxics Substances Control Act, Norway Product regulations, Japan Chemical Substance Control Law, and State of Maine law. Chemical classes include: benzidine based dyes, beryllium compounds, dibutyltin compounds, halogenated flame retardants, heavy metals and their compounds (arsenic,

cadmium, lead, and mercury), isocyanates, ozone depleting substances, perfluoroalkyl carboxylic acids (PFCA)s C9–C14, perfluorohexane sulfonate (PFHxS), phenylmercury and compounds, polychlorinated naphthalenes, polycyclic aromatic hydrocarbons (PAHs), and phthalates.

**Target** has two priority chemical lists:

- **Formulated Products Target Priority Chemical List (TPCL)** that is “built into business processes to incentivize and design products that are better for people and the planet.” Chemical classes include: alkylphenol ethoxylates (APEs); coal tar ingredients; ethanolamines and ethanolamides; formaldehyde donors; fragrances — nitro musks, polycyclic musks, and other fragrances; glycol ethers; nitrilotriacetic acid and salts, nonylphenol ethoxylates (NPEs); parabens; PFAS; phthalates; siloxanes; solvents (xylene, toluene); and UV absorbers.
- **Textile Chemical RSL/MRSL:** The RSL applies to all owned brand products for Target and includes clothing and non-clothing (furniture, bedding, footwear, umbrellas, etc.), textiles. The RSL includes heavy metals, long chain perfluorinated alkyl carboxylates, PFOA/PFOS, and phthalates. The MRSL applies to owned brand textile supply chains only and includes: clothing, accessories, footwear, bedding, bath, and kitchen textiles; and factory dyeing/finishing forward. Target uses ZDHC’s MRSL for textile chemicals.

**Walmart** Reference Lists of Priority Chemicals: These “authoritative and regulatory lists may be used as resources to identify Walmart Priority Chemicals for reduction, restriction, or elimination in accordance with Walmart’s Commitment to Sustainable Chemistry in Consumables.” The reference lists are from the European Union, International Agency for Research on Cancer, UN Environment Programme, US EPA, US National Toxicology Program, and States of California, Maine, Minnesota, and Washington.



2021 RESULTS

# MANAGEMENT STRATEGY PILLAR (M)

**“A COMPREHENSIVE CHEMICALS POLICY INDICATES THE CAPACITY AND WILLINGNESS TO SET AND ACHIEVE BOLD CHEMICAL FOOTPRINT REDUCTION GOALS.”**

Two key performance indicators of best practices in chemicals management are the comprehensiveness of an organization’s Chemicals Policy (Question M1) and Accountability Measures (Question M4). Figure 6 illustrates how the comprehensiveness of chemicals policies and accountability measures increases from New and Returning Responders to Frontrunners.

## Chemical Policies: Question M1

Corporate policies set the organizational direction for chemicals management. Thus, a **comprehensive chemicals policy indicates the capacity and willingness to set and achieve bold chemical footprint reduction goals**. A comprehensive chemicals policy:

- Addresses chemicals of high concern and safer alternatives in:
  - products,
  - packaging,
  - supply chains,
  - facilities, and
  - manufacturing (if applicable).
- Takes a hazard-based approach to prioritizing chemicals of concern and identifying safer alternatives.
- Is publicly available.

Eight companies scored seven or more points on their chemicals policy. Those eight were a diverse mix of small to very large companies across five different sectors. Two examples of comprehensive chemical policies are HP’s “Materials and Chemical Management Policy”<sup>27</sup> and Walmart’s “Sustainable Chemistry Commitment”<sup>28</sup> for formulated products (see below).

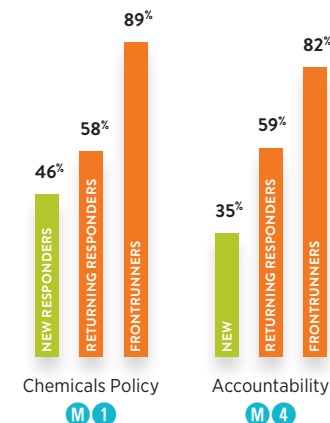


FIGURE 6. CFP 2021 Survey Scores: New Responders, Returning Responders, and Frontrunners for Chemicals Policy (Question M1) and Accountability (Question M4) (percent of total points achieved for each question)



**HP USES “A PRECAUTIONARY APPROACH” TO “REDUCE HAZARD BY REPLACING A CHEMICAL OF CONCERN WITH A LESS HAZARDOUS ALTERNATIVE”**

## Accountability Measures: Question M4

Question M4 addresses the comprehensiveness of corporate accountability measures for chemicals management, including:

- job descriptions and individual annual performance metrics,
- senior management responsibilities,
- financial incentives for senior management, and
- Board engagement.

## “COMPANIES NEED TO SET GOALS, MEASURE THEIR FOOTPRINT, AND DOCUMENT PROGRESS TOWARDS SAFER CHEMICALS IF SOCIETY IS TO MEET SDGS 3, 6, AND 12.”

Eight companies scored full points for M4, with a mixture of company sizes (small to very large), sectors (four), and a variety of formulated products and articles. Examples of accountability measures from public disclosures include:

- **Reckitt:** “We have reporting lines for Safety and Quality to our Global Executive Committee and Board sub-committee. This gives strong accountability, governance, and oversight, supported by an independent internal audit programme.”<sup>31</sup>
- **HP:** “We are committed to ensuring the principles outlined in this policy are integrated into our business operations. This includes conducting assessments, defining performance goals and metrics, reviewing results with senior management regularly, and publicly reporting on our continual improvement in areas covered by this policy.”<sup>32</sup>

Corporate accountability measures and policies institutionalize proactive chemicals management initiatives and leave companies less vulnerable to these initiatives not being implemented after internal corporate champions depart the company.

## BEST PRACTICES, CHEMICAL MANAGEMENT

# EXAMPLES OF COMPREHENSIVE CHEMICALS POLICIES: HP AND WALMART

HP’s policy meets all the key attributes of a comprehensive chemicals policy by making it publicly available and clearly stating that:

- It applies to: “materials and chemicals for use in products, packaging, and manufacturing processes”; and “all HP employees and businesses worldwide, and also extends to HP’s suppliers.”
- The organization will:
  - “proactively evaluate materials and chemicals in HP’s products and supply chain, and prioritize them for restriction;”
  - “determine the hazard characteristics of chemical constituents and formulations in products, packaging, and manufacturing processes;” and
  - use “a precautionary approach, reduce hazard by replacing a chemical of concern with a less hazardous alternative.”<sup>29</sup>

Similarly, Walmart’s “Sustainable Chemistry Commitment” meets the key attributes of a comprehensive chemicals policy specifically for formulated products by making it publicly available and clearly stating that the company will:

- “Annually participate in the Chemical Footprint Project.”
- Encourage “all suppliers to provide full online public ingredient disclosure for formulated consumable items sold at Walmart U.S. and Sam’s Club U.S. stores” because “customers increasingly want to know more about the ingredients in their products.”
- Advance safer formulations by embracing the “use of the principles of green chemistry” and encouraging “informed substitution by suppliers and manufacturers to mitigate, reduce, and eliminate potential hazards associated with product formulations.”
- “Reduce the consumables chemical footprint of Walmart U.S. and Sam’s Club U.S. stores by 10 percent” by 2022.<sup>30</sup>



2021 RESULTS

# FOOTPRINT MEASUREMENT PILLAR (F)

**“COMPANIES NEED TO SET GOALS, MEASURE THEIR FOOTPRINT, AND DOCUMENT PROGRESS TOWARDS SAFER CHEMICALS IF SOCIETY IS TO MEET SDGS 3, 6, AND 12.”**

**Companies need to set goals, measure their footprint, and document progress towards safer chemicals if society is to meet SDGs 3, 6, and 12.** The CFP Survey tracks these three key performance indicators through: Footprint Reduction Goal (F1), Footprint Measurement (F2), and Footprint Change (F3). These three questions represent 73% of the points (24 of 33 points) in the Chemical Footprint Pillar. Question F3 is the most heavily weighted question at 10 points to incentivize reducing chemical footprints.

Frontrunners differentiated themselves from New and Returning Responders in the Footprint Measurement Pillar. In averaging 97% of total points for the Footprint Measurement Pillar (see Figure 3), Frontrunners demonstrated that taking action to identify and avoid CoHCs and use safer alternatives is an organizational priority. They set chemical footprint reduction goals, measured and reduced their chemical footprints, and integrated criteria for safer alternatives into their design and safety processes. The dramatic drop for Questions F1, F2, and F3 from Frontrunners to Returning Responders and from Returning Responders to New Responders (see Figure 4) highlights the need for organizational leadership in setting goals, measuring the current state, and making and reporting progress in reducing chemical footprints.

## Chemical Footprint Reduction Goal: Question F1

Twenty-four responders to the 2021 Survey set a goal to reduce individual chemicals, one or more chemical classes, or their chemical footprint; or did not use any CoHCs in their products. Sixteen of those 24 companies publicly disclosed the goal, CoHCs or chemical classes included in the goal, annual progress towards meeting the goal, or that their products contain no CoHCs. Examples include:

- **Reckitt**, a major consumer goods company and retailer supplier with brands including Lysol, Woolite, and Calgon, announced it is “aiming for a 65% reduction in our chemical footprint by 2030.” Reckitt defines “chemical footprint as net revenue from SKUs containing >0.1% (by weight) of chemicals of high concern (CoHC), as legally allowed, across all business units.”<sup>33</sup>
- **Target’s** CoHC reduction goals include removing: perfluorinated chemicals (PFCs) from textile products by 2022; flame retardants in textiles that “are potential carcinogens or pose harm” by 2022; and PFAS from “owned brand products including but not limited to textiles, formulated cosmetics, and beauty and cookware items” by 2025.<sup>34</sup>
- **Walmart** set its goal in 2017 to reduce the chemical footprint of consumables (household and personal care products) by 10% by 2022.<sup>35</sup>



**RECKITT’S GOAL IS A 65% REDUCTION IN THEIR CHEMICAL FOOTPRINT BY 2030.**

## OVERALL, THE NET CHANGE AMONG THE SEVEN COMPANIES CALCULATING THEIR CHEMICAL FOOTPRINTS BY MASS WAS A REDUCTION OF 83.4 MILLION POUNDS/37.8 MILLION KILOGRAMS IN COHCs.

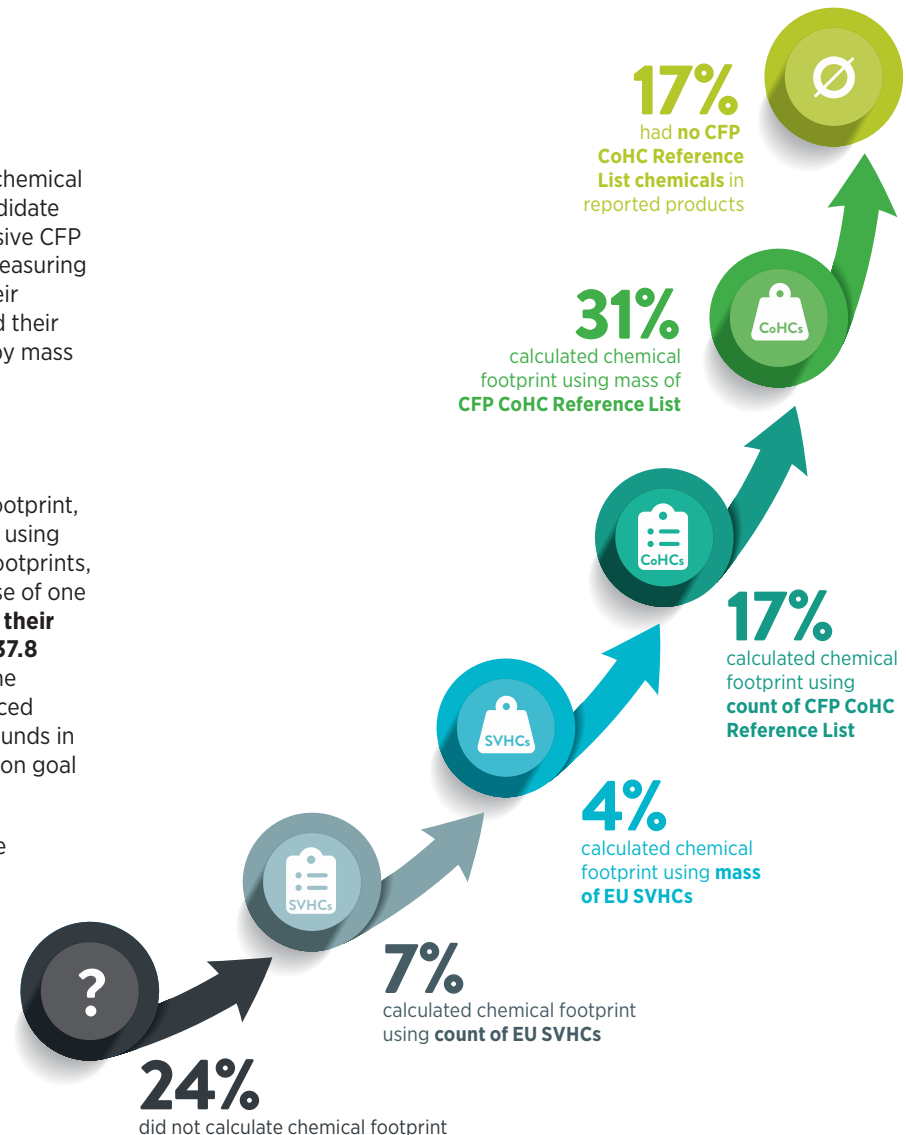
### Chemical Footprint Measurement: Question F2

The CFP Survey offers Responders different levels for measuring their chemical footprint. They can either measure based on the European Union's Candidate Substances of Very High Concern (SVHC's) list or the more comprehensive CFP CoHC Reference List. In the 2021 Survey, 76% of companies reported measuring their footprint or reported no CFP CoHC Reference List chemicals in their products, an improvement from the 2020 Survey where 60% calculated their footprint. Nearly one-third of the companies calculated their footprint by mass of CoHCs using the CFP Reference List.

### Chemical Footprint Change: Question F3

Demonstrating that companies can measure and track their chemical footprint, seven companies calculated their change in chemical footprint by mass using the CFP CoHC Reference List. Five companies reduced their chemical footprints, while two saw their footprints rise due to increased sales over the course of one year. **Overall, the net change among the seven companies calculating their chemical footprints by mass was a reduction of 83.4 million pounds/37.8 million kilograms in CoHCs.** Walmart, for example, publicly reported the change in its chemical footprint for consumables, reporting that it reduced priority chemicals from 218.6 million pounds in 2018 to 206.2 million pounds in 2019 to 179.4 million pounds in 2020; thereby exceeding its 10% reduction goal with a 17% reduction.<sup>36</sup>

To put the chemical footprint reductions reported to CFP in context, the successful Massachusetts Toxics Use Reduction program documented companies reducing toxic chemicals shipped in products by 53 million pounds over 13 years, from 2007 to 2020.<sup>37</sup> Because of the large size and sales of companies in the Survey, their reductions of CoHCs in products sold over one year were 150% greater than what companies in Massachusetts reduced in toxic chemicals shipped in products over 13 years.







**“TARGET: ‘ONE KEY PRINCIPLE OF OUR CHEMICAL POLICY IS THE DESIRE TO FIND SAFER ALTERNATIVES AND AVOID REGRETTABLE SUBSTITUTIONS.’”**

**Safer Alternatives: Question F5**

The CFP Survey assesses where companies are on the journey to safer solutions to CoHCs by asking whether a company:

- defines “safer alternative” consistent with the CFP definition,
- communicates its definition of safer alternative to suppliers,
- rewards suppliers for using safer alternatives,
- integrates safer alternative criteria into product development,
- tracks progress to implementing safer alternative criteria across products, and
- publicly discloses its definition of safer alternatives.

Sixteen companies scored four points or more for Question F5, which is a six-point question. Companies communicate the concept of safer chemicals using a variety of terms, including:

- **Herman Miller:** “Material Chemistry”<sup>38</sup>
- **HP:** “Responsible Chemistry”<sup>39</sup>
- **Reckitt<sup>40</sup> and Target<sup>41</sup>:** “Green Chemistry”
- **Walmart:** “Sustainable Chemistry” and “Green Chemistry”<sup>42</sup>

Here are a few highlights in publicly disclosed statements on how companies communicate their approach to safer alternatives:

- **HP:** “When exploring safer alternatives to materials currently in use, we follow a precautionary approach, use the National Academy of Sciences publication A Framework to Guide Selection of Chemical Alternatives, and incorporate the GreenScreen® for Safer Chemicals methodology. We screen all ingredients in HP-formulated inks using the

GreenScreen methodology, as part of our new product development process... We continually innovate to reduce the use of materials of concern. Highlights in 2021 included: 83% of personal systems product series are low halogen; 45% of EPEAT® registered personal systems products contain GreenScreen Benchmark 2 or 3 plasticizers and flame retardants.”<sup>43</sup>

- **Reckitt:** Our “Ingredient Steering Group oversees how we adopt safe and effective alternatives in new or reformulated products. This is a global, cross-functional task force to screen new and safer alternatives to use across our portfolio. To help us develop safe products with the lowest possible environmental impact, we use the key concepts of green chemistry in product development: Designing safer products; Preventing waste; Designing for energy efficiency; Designing for degradation, reuse or recyclability; [and] Designing for bio-based or renewable raw materials.”<sup>44</sup>
- **Target:** “One key principle of our chemical policy is the desire to find safer alternatives and avoid regrettable substitutions. We’ve made detailed guidance and resources available to our suppliers on how to find, assess, compare and select safer alternatives to harmful chemicals in their products and how to avoid regrettable substitutions.”<sup>45</sup>
- **Walmart:** “Advancing Safer Formulation: The scientific community with which Walmart consults considers safer chemicals to be chemical products designed to preserve efficacy of function while reducing toxicity. As part of the 12 Principles of Green Chemistry, Walmart embraces use of the principles of green chemistry and encourages informed substitution by suppliers and manufacturers to mitigate, reduce, and eliminate potential hazards associated with product formulations.”<sup>46</sup>

All of these companies communicate to their suppliers that they want them to use demonstrably safer alternatives to CoHCs.

## 2021 RESULTS

## DISCLOSURE &amp; VERIFICATION PILLAR (D)

**“IF COMPANIES WANT TO MAINTAIN SHAREHOLDER CONFIDENCE THEY MUST PROVIDE HONEST AND TRANSPARENT PLANS FOR ADDRESSING THEIR CHEMICAL RISK”**  
**– ALISSA SASSO, ENVIRONMENTAL DEFENSE FUND**

Transparency in chemicals management beyond regulatory requirements is lacking for most companies, whether or not they participate in the CFP Survey. Companies are reluctant to disclose where they are on the journey to safer chemicals, preferring to announce achievements rather than work in progress. Yet at the same time, investors and consumers demand greater transparency on environmental, social, and governance (ESG) issues, including chemicals management and safety. If companies want to maintain shareholder confidence “they must provide honest and transparent plans for addressing their chemical risk.”<sup>47</sup>

The Disclosure & Verification Pillar scores companies on their public disclosure of chemical ingredients in products (Question D1), CFP responses (Question D2), and CFP score (Question D3); as well as on whether their answers are verified by a third party (Question D4). On average, all companies scored lowest on the Disclosure & Verification Pillar. The very low score for New Responders — 8% of total points, and low score for Returning Responders — 27% of total points (see Figure 3), for the Disclosure & Verification Pillar reflects the generally low visibility of information on chemical safety.

Chemical transparency is on the rise in the household and personal care and building product sectors. Beautycounter exemplifies transparency in the personal care product sector with its commitment to “Share Transparently — Every formula ingredient, including known components of fragrances, flavors, and intentionally added preservatives, are listed on our product labels or on Beautycounter.com.”<sup>48</sup> In the building product sector, the rapidly growing supply of products with Health Product Declarations (HPDs)<sup>49</sup> reflects the rising demand for greater materials transparency.<sup>50</sup> In addition, companies in these two sectors were the leading business signatories to the Principles for Chemical Ingredient Disclosure, which call for greater transparency of chemicals in products.<sup>51</sup>

The CFP Survey awards transparency by recognizing Disclosure Leaders, those companies that disclose their CFP responses (D2) and score (D3). The ten Disclosure Leaders from the 2021 Survey were: Beautycounter, BD, Case Medical, GOJO, Grove Collaborative, Herman Miller, HP, Insignem, Naturepedic, and Walmart.

**Question D4:** Verification asks whether a third party independently evaluated a company’s CFP Survey answers. Very few companies currently verify their answers, but this is one of the most frequently asked questions concerning the CFP Survey: “how can you trust the responses?” While Clean Production Action reviews the documentation of all responses to the Survey, we encourage responders to the Survey to take the next step and validate answers by using a third party to verify their responses to the CFP questions.<sup>52</sup>



OUR 2021 DISCLOSURE LEADER  
AWARD WINNERS



Insignem



BEAUTYCOUNTER



Case Medical



# TAKE ACTION

The rising demands of investors, business customers, and consumers for greater transparency on environmental, social, and governance (ESG) issues means that companies will continue to confront important decisions concerning chemicals management and safety. The CFP Survey is a unique and authentic evaluation framework for companies that want to benchmark their performance to an externally validated methodology and communicate to their stakeholders about their chemical safety efforts. Stakeholders can join the chemical footprint movement by:

- **Brands, retailers, & manufacturers:**
  - Commit to chemical footprint reductions by at least 50% by 2030.
  - Participate in the 2023 CFP Survey (<https://www.chemicalfootprint.org>).
- **Investors:**
  - Sign on as a CFP Signatory (<https://www.chemicalfootprint.org/value/be-a-signatory>).
  - Join the Investor Environmental Health Network (<https://iehn.org>).
- **Purchasers & NGOs:** sign on as a CFP Signatory (<https://www.chemicalfootprint.org/value/be-a-signatory>).
- **All:** participate in the BizNGO Chemicals Management Work Group where discussions and decisions on chemical footprint metrics and key performance indicators happen ( <https://www.bizngo.org/safer-chemicals>).

Join the chemical footprint movement today!

## CFP WELCOMES...

Investors, purchasers, retailers, and NGOs in engaging companies in participating in the 2023 Survey.

Companies demonstrating their leadership in chemicals management by participating in the 2023 Survey.

The CFP Survey will be open from March to June 2023.

For more information contact us at [moreinfo@chemicalfootprint.org](mailto:moreinfo@chemicalfootprint.org) or go to <https://chemicalfootprint.org>.

# ENDNOTES

- Linn Persson, Bethanie M. Carney Almroth, Christopher D. Collins, Sarah Cornell, Cynthia A. de Wit, Miriam L. Diamond, Peter Fantke, Martin Hassellöv, Matthew MacLeod, Morten W. Ryberg, Peter Søgaard Jørgensen, Patricia Villarrubia-Gómez, Zhanyun Wang, and Michael Zwicky Hauschild, "Outside the Safe Operating Space of the Planetary Boundary for Novel Entities," *Environmental Science & Technology* 56, no. 3 (January 2022): 1510-1521, accessed November 28, 2022, <https://pubs.acs.org/doi/10.1021/acs.est.1c04158>.
- United Nations, Human Rights Council (UN HRC), The Right to a Clean, Healthy and Sustainable Environment: Non-Toxic Environment (A/HRC/49/53) (January 2022): accessed November 28, 2022, <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G22/O04/48/PDF/G2200448.pdf?OpenElement>.
- Sudarshan Kurwadkar, Jason Dane, Sushil R. Kanel, Mallikarjuna N. Nadagouda, Ryan W. Cawdrey, Balram Ambade, Garrett C. Struckhoff, Richard Wilkin, "Per- and polyfluoroalkyl substances in water and wastewater: A critical review of their global occurrence and distribution," *Science of The Total Environment* 809 (February 2022): accessed November 28, 2022, <https://doi.org/10.1016/j.scitotenv.2021.151003>.
- Ian T. Cousins, Jana H. Johansson, Matthew E. Salter, Bo Sha, and Martin Scheringer, "Outside the Safe Operating Space of a New Planetary Boundary for Per- and Polyfluoroalkyl Substances (PFAS)," *Environmental Science & Technology* 56, no. 16 (August 2022): 11172-11179, accessed November 28, 2022, <https://pubs.acs.org/doi/10.1021/acs.est.2c02765>.
- UN HRC (2022)
- United Nations Environment Programme, For people and planet: The United Nations Environment Programme strategy for tackling climate change, biodiversity and nature loss, and pollution and waste from 2022-2025 (2021): accessed November 28, 2022, <https://wedocs.unep.org/bitstream/handle/20.500.11822/35875/K2100501-e.pdf>.
- UN HRC (2022)
- UN HRC (2022)
- The Food and Agricultural Organization of the United Nations and the World Health Organization (FAO/WHO), Environmental Health Criteria 240: Principles and Methods for Risk Assessment of Chemicals in Food (2009).
- Barbara Demeneix, Laura N Vandenberg, Richard Ivell, R Thomas Zoeller, "Thresholds and Endocrine Disruptors: An Endocrine Society Policy Perspective," *Journal of the Endocrine Society* 4, no. 10, (2020): accessed November 28, 2022, <https://doi.org/10.1210/ijendso/bvaa085>.
- European Commission (EC), EU Chemicals Strategy for Sustainability Towards a Toxic-Free Environment (October 2020): accessed November 28, 2022, [https://environment.ec.europa.eu/strategy/chemicals-strategy\\_en](https://environment.ec.europa.eu/strategy/chemicals-strategy_en).
- EC (2020)
- Mark S. Rossi and Wanda Ratliff, Chemical Footprint of Products Commonly Used in Pediatrics Departments, Clean Production Action (2017): accessed November 28, 2022, <https://www.chemicalfootprint.org/results/report-cf-pediatrics>.
- Paul Verney, "Resolution Round-Up: Investors to Target Directors at Climate Laggards, ISS Poll Suggests," *Responsible Investor* (October 18, 2022): accessed November 28, 2022, <https://www.responsible-investor.com/resolution-round-up-investors-to-target-directors-at-climate-laggards-iss-poll-suggests/>.
- Gabby Landsverk, "Some Yoga Pants Contain Toxic Chemicals Linked to Cancer, Report Says," *Insider* (January 24, 2022): accessed November 28, 2022, <https://www.insider.com/yoga-pants-may-contain-toxic-chemicals-linked-to-cancer-lab-2022-1>.
- Verney (2022)
- See page 13 in: Cheri Peele, Mark S. Rossi, Sally Edwards, Alexandra McPherson, and Olivia LaMarche, Front-runners in Chemical Footprinting: 2020 Survey Results, Fifth Annual Report, Clean Production Action (2020): accessed November 28, 2022, <https://www.chemicalfootprint.org/results/2020-report> (Peele, et al., 2020).
- GreenMoney, "Investors Commend Market Leaders on Chemical Footprinting and Safety," (March 2021): accessed November 28, 2022, <https://greenmoney.com/investors-commend-market-leaders-on-chemical-footprinting-and-safety/>.
- Clean Production Action, Investor Environmental Health Network, "Dollar General, 2021, Shareholder Resolution," (2021): accessed November 28, 2022, <https://iehn.org/resources/resolution/improving-dollar-generals-chemical-footprint>.
- Clean Production Action, Investor Environmental Health Network, "Burlington Stores Inc., 2022, Shareholder Resolution," (2022): accessed November 28, 2022, <https://iehn.org/resources/resolution/burlington-stores-inc>.
- Clean Production Action, Investor Environmental Health Network, "2022 Bed, Bath and Beyond Chemical Disclosure Proposal," (2022): accessed November 28, 2022, <https://iehn.org/resources/resolution/2022-bed-bath-and-beyond-chemical-disclosure-proposal>.
- As You Sow, "McDonald's Corporation: Report on Actions to Reduce PFAS in Food Contact Materials" (December 2020): accessed November 28, 2022, <https://www.asyousow.org/resolutions/2020/12/10/mcdonalds-report-on-actions-to-reduce-pfas-in-food-contact-materials>.
- U.S. Securities and Exchange Commission, "Final Rule: Enhanced Reporting of Proxy Votes by Registered Management Investment Companies; Reporting of Executive Compensation Votes by Institutional Investment Managers," (2022): accessed November 28, 2022, <https://www.sec.gov/rules/final/2022/33-11131.pdf>.
- See the Chemical Footprint Project Survey questions at: Clean Production Action, Chemical Footprint Project, "Survey Guidance:" accessed November 28, 2022, <https://www.chemicalfootprint.org/assess/survey-guidance>.
- For CFP Chemicals of High Concern Reference List see: Clean Production Action, Chemical Footprint Project, "CFP Chemicals of High Concern Reference List:" accessed November 28, 2022, <https://www.chemicalfootprint.org/assess/survey-resources-2>.
- See page 11 in Peele et al. (2020) for the methodology behind the development of the CFP CoHC Reference List.
- HP, Materials and Chemical Management Policy, (January 2017): accessed November 28, 2022, <https://h20195.www2.hp.com/V2/GetDocument.aspx?docname=c05354207>.
- Walmart, "Sustainable Chemistry Commitment," (2022a): accessed November 28, 2022, <https://www.walmartsustainabilityhub.com/sustainable-chemistry/walmart-sustainable-chemistry-commitment> (Walmart, 2022a).
- HP (2017)
- Walmart (2022a)
- Reckitt, Sustainability Insights (2021): accessed November 28, 2022, <https://www.reckitt.com/media/10000/reckitt-sustainability-insights-2021.pdf>.
- HP (2017)
- Reckitt (2021)
- Target, "Sustainability & ESG, Environment, Chemicals:" accessed November 28, 2022, <https://corporate.target.com/sustainability-esg-environment/chemicals>.
- Walmart (2022a)
- Walmart, "Safer, Healthier Food & Other Products," (updated June 14, 2022): accessed November 28, 2022, <https://corporate.walmart.com/esgreport/esg-issues/safer-healthier-food-other-products> (Walmart, 2022b).
- Massachusetts Toxics Use Reduction, "TURA Dashboard:" accessed November 28, 2022, [https://www.turadata.org/extensions/TURA\\_Dashboard/TURA\\_Dashboard.html](https://www.turadata.org/extensions/TURA_Dashboard/TURA_Dashboard.html).
- Herman Miller, Better World Report (2021): accessed November 28, 2022, [https://www.hermanmiller.com/content/dam/hermanmiller/documents/a\\_better\\_world/Better\\_World\\_Report.pdf](https://www.hermanmiller.com/content/dam/hermanmiller/documents/a_better_world/Better_World_Report.pdf).
- HP, Sustainable Impact Report (2021): accessed November 28, 2022, <https://www8.hp.com/h20195/v2/GetPDF.aspx/c08228880.pdf>.
- Reckitt (2021)
- Target (2022)
- Walmart (2022a)
- HP, Sustainability and Compliance Center, "Do you use chemicals that are hazardous to the environment? If yes, do you have targets to introduce chemicals that have less impact?," (updated July 11, 2022): accessed November 28, 2022, <https://sustainability.ext.hp.com/en/support/solutions/articles/35000064500-do-you-use-chemicals-that-are-hazardous-to-the-environment-if-yes-do-you-have-targets-to-introduce->
- Reckitt (2021)
- Target (2022)
- Walmart (2022a)
- Alissa Sasso, "Companies Respond to Growing Investor Calls for Transparent Chemicals Management," *Environmental Defense Fund+Business* (July 14, 2020): accessed November 28, 2022, <https://business.edf.org/insights/companies-respond-to-growing-investor-calls-for-transparent-chemicals-management/>.
- Beautycounter, "Our Ingredient Selection Process" (2022): accessed November 28, 2022, <https://www.beautycounter.com/transparency>.
- Health Product Declaration Collaborative: accessed November 28, 2022, <https://www.hpd-collaborative.org/>.
- Patrick Ford, "The Growing Demand for Transparency in Buildings, The Construction Specifier (March 12, 2021): accessed November 28, 2022, <https://www.constructionspecifier.com/the-growing-demand-for-transparency-in-buildings/>.
- Clean Production Action, BizNGO, "Principles for Chemical Ingredient Disclosure:" accessed November 28, 2022, <https://www.bizngo.org/public-policies/principles-for-chemical-ingredient-disclosure>.
- Clean Production Action, Chemical Footprint Project, "CFP Verifier Program," (2022): accessed November 28, 2022, <https://www.chemicalfootprint.org/assess/cfp-verifier-program>.



## AUTHORS:

**Mark S. Rossi, Ph.D.**  
Executive Director,  
Clean Production Action

**Agnes Cheng**  
Technical Researcher,  
Clean Production Action

**Angela Pinilla-Urzola, Ph.D.**  
Program Manager,  
Chemical Footprint Project (CFP)

**Alexandra McPherson**  
Director, Investor Environmental Health Network (IEHN)

## REVIEWER:

**Sally Edwards, Sc.D.**  
Senior Research Associate Lowell Center  
for Sustainable Production at the University  
of Massachusetts Lowell

## CFP STEERING COMMITTEE:

**Susan Baker**  
Trillium Asset Management, LLC

**Roberto Bertin**  
Walmart

**Constantina Bichta**  
Boston Common Asset Management

**Boma Brown-West**  
Healthy Building Network

**Tim Greiner**  
Pure Strategies

**Ronald Hart**  
Independent Advisor

**Mary Ellen Leciejewski**  
Dignity Health

**Roger McFadden**  
McFadden and Associates, LLC

**Alexandra McPherson**  
Investor Environmental Health Network

**Monica Nakielski**  
Advocate Aurora Health

**Joel Sigler**  
Kaiser Permanente

# cfp the chemical footprint project

**The Chemical Footprint Project (CFP)**, a program of Clean Production Action, is the first-of-its-kind initiative to measure chemical footprints and assess corporate progress away from hazardous chemicals to safer alternatives. Now companies can chart and report on their progress in reducing hazardous chemicals to a common framework. Signatories to the Chemical Footprint Project include investors with over \$2 trillion in assets under management and purchasers with over \$800 billion in procurement power. Together with these supporters we engage brands in assessing and reporting their chemicals management policies, procedures, and practices through the annual CFP Survey. Founded by Clean Production Action, Lowell Center for Sustainable Production at the University of Massachusetts Lowell, and Pure Strategies in 2014, CFP is now a program of Clean Production Action.

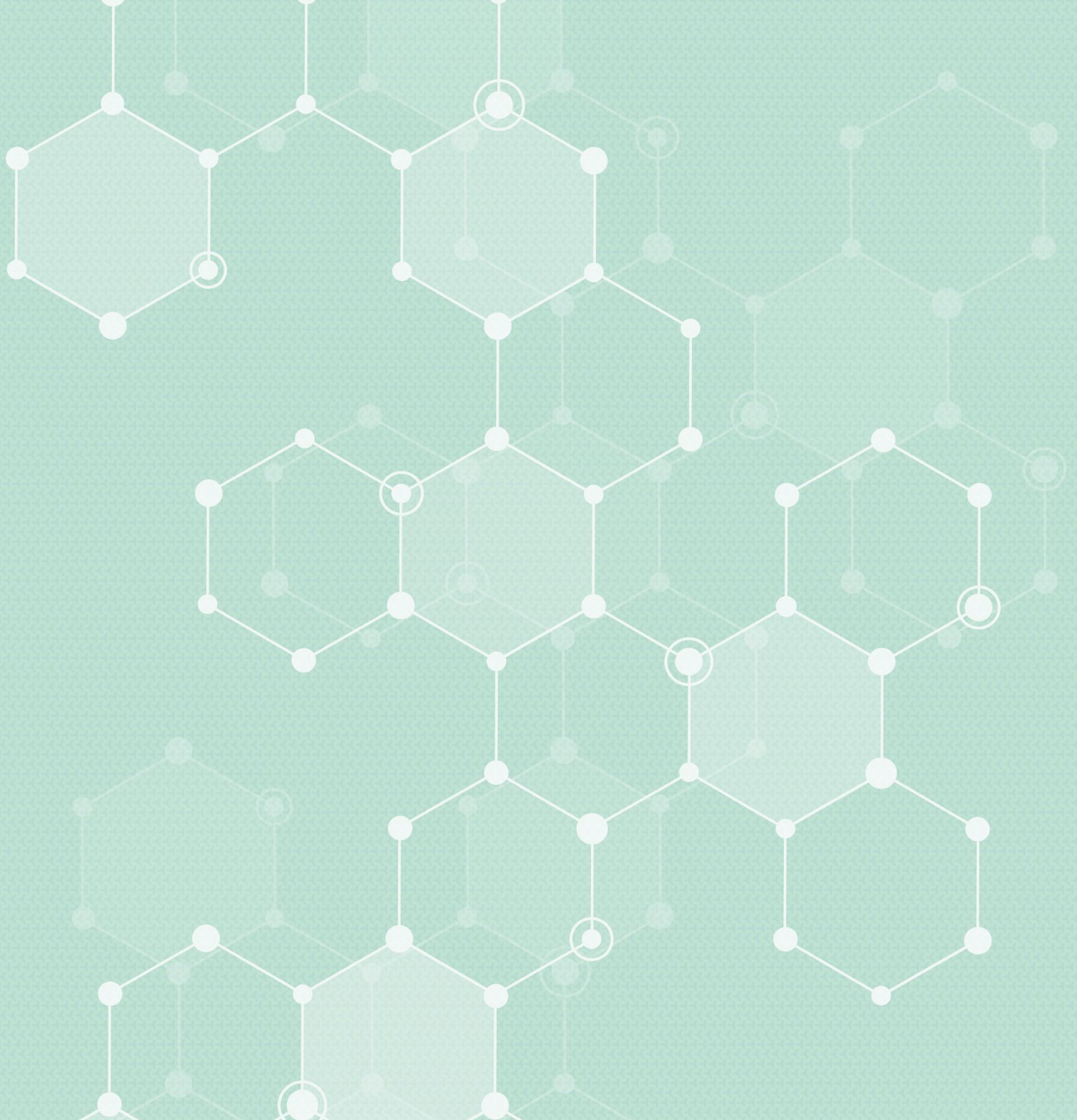
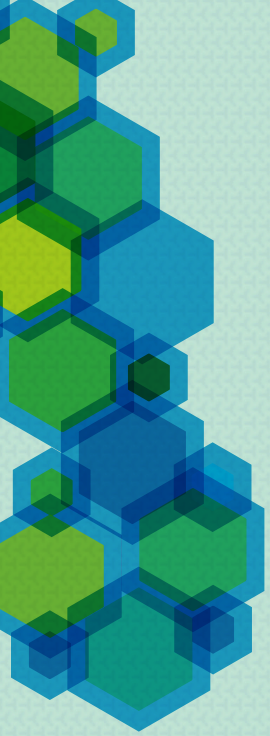
**Investor Environmental Health Network (IEHN)**, a program of Clean Production Action, is a leadership network of investors reducing the financial risks of chemical pollution while leveraging the economic value of green chemistry. IEHN recognizes that a company's brand reputation, public trust, and market share are linked to the environmental and human health risks and safety of its products. Through direct corporate engagement IEHN members advance solutions and strategies like the Chemical Footprint Project to transform business practices.

**Clean Production Action's** mission is to design and deliver strategic solutions for green chemicals, sustainable materials, and environmentally preferable products. We are a solutions organization. Our tools, GreenScreen® for Safer Chemicals and Chemical Footprint Project, simplify the complexity of substituting chemicals of concern to human health and the environment with green chemistry solutions. Our collaborations, BizNGO and Investor Environmental Health Network, provide effective platforms for practitioners and thought leaders to work together in advancing chemicals, materials, products, and systems that are healthy for people and the planet. Together our tools and collaborations are transforming the toxic chemical economy into one that is healthy for people and the planet.

**Publication Date: December 2, 2022**









[chemicalfootprint.org](http://chemicalfootprint.org)

**cfp** the chemical  
footprint project  
A program of Clean Production Action



**Chemical Footprint Project**  
C/O Clean Production Action  
1310 Broadway, Suite 101  
Somerville, MA 02144  
USA  
+1-781-391-6743

[moreinfo@chemicalfootprint.org](mailto:moreinfo@chemicalfootprint.org)